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ABSTRACT

This report on the feasibility of the placement rate concept contains a body of knowledge about the limitations and uses of the placement rate concept for comparing and assessing vocational and job training programs offered by different program providers in California. The report is divided into three parts. Part I, the executive summary, is intended to stand alone in presenting major research questions, key findings and conclusions, and recommendations. Four figures are presented in part I. These figures explain (1) the definitional and operational limitations of the placement rate concept as a means of comparing program performance; (2) the technical limits of state-level data systems as a means of comparing placement rates among the seven program providers included in this study; (3) six components of a comprehensive student followup system; and (4) a conceptual model for viewing three types of student impacts and program outcomes of vocational education and job training programs. Part II of the report contains technical information, organized in four sections. The first section explains the project objectives, procedures, and major findings. The second section deals with the four criteria used to determine the feasibility of the placement rate concept, while the third section contains major findings and conclusions related to the criteria. The final section explores uses of and alternatives to the placement rate concept for program planning and evaluation. Part III of the report contains appendix materials, including names of those interviewed, the survey instrument, and a glossary. (KC)

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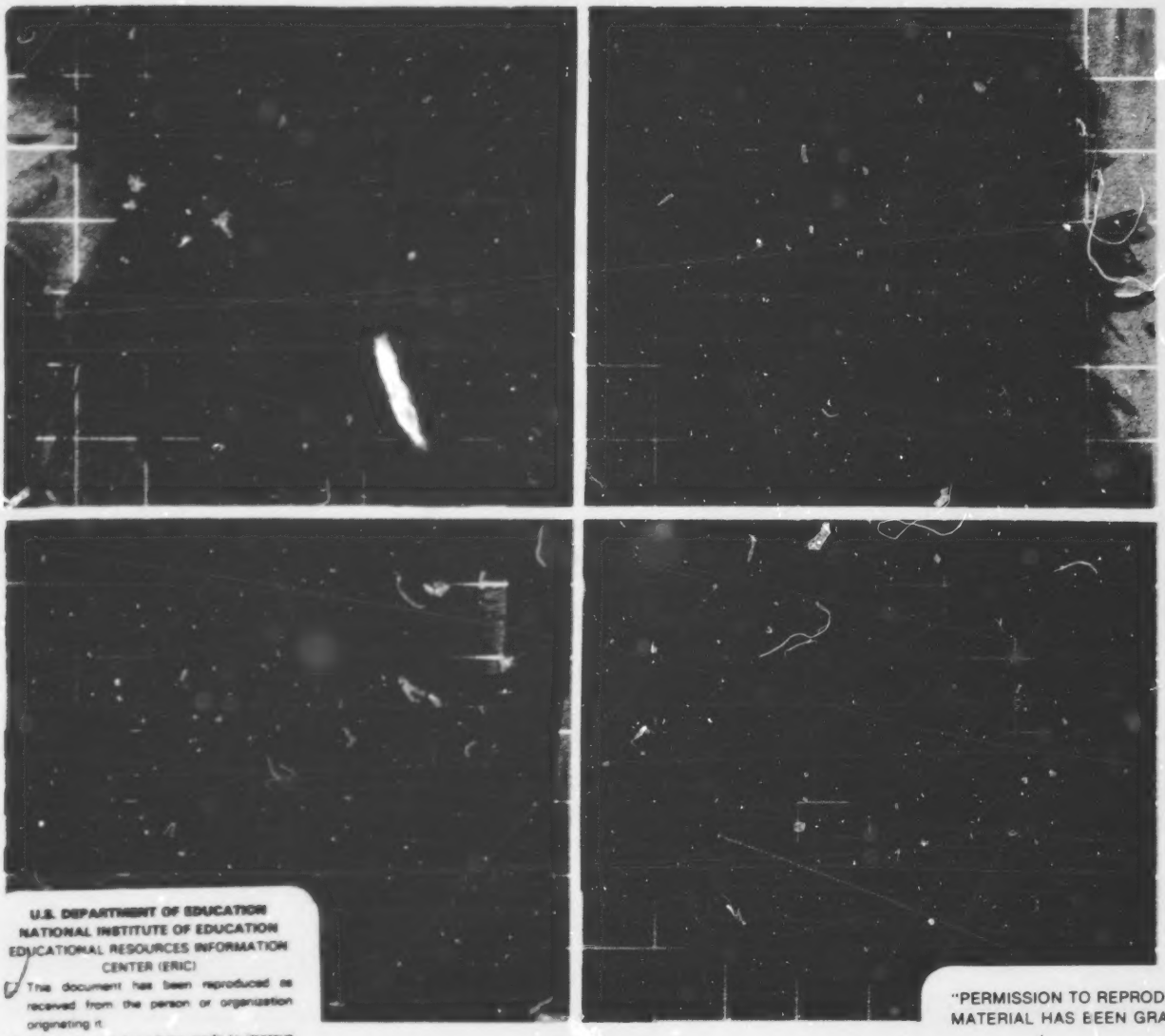
PLACEMENT RATE CONCEPT

A Feasibility Study for Utilizing the Placement Rate Concept in California Vocational Education to Determine Impacts on Students, Program Outcomes, Program Planning, Program Evaluation, and Program Improvement.



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October, 1984

PLACEMENT RATE CONCEPT

A Feasibility Study for Utilizing the Placement Rate Concept in California Vocational Education to Determine Impacts on Students, Program Outcomes, Program Planning, Program Evaluation, and Program Improvement.

A Study Conducted

by

CARVELL EDUCATION MANAGEMENT PLANNING, INC.
P.O. Box 531, Los Altos, CA 94022

This project was conducted in cooperation with a steering committee, in a joint venture among four California agencies.

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FINAL REPORT
SUBMITTED OCTOBER 30, 1984

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Study Team

The study was directed by Fred Carvell. Joan B. Carvell participated in all aspects of data collection and analysis. Ernest Neasham conducted the analysis of existing state placement data and systems for secondary and postsecondary vocational programs available from the State Department of Education and Chancellor's Office, California Community Colleges (COCCC). Philip Nash, Dean of Instructional Planning, Monterey Peninsula College, assisted in making contacts with state and federal agencies. Gordon Ray, Administrator, Vocational Education, Salinas Union High School District, and Director of Mission Trails ROP, assisted in data collection and analysis. Walter Brooks, from Shasta College, provided liaison and information on the follow-up system being developed and pilot-tested for COCCC. Art Smith, who served on the advisory committee, provided a much-needed hand in conducting a formal telephone survey of secondary school administrators in the state. Charlot Holzkamper helped edit and produce the final report.

Acknowledgments

The study team conferred with numerous persons during the study. All were constructive in contributing their ideas, information, and opinions about a topic that has both policy and practical implications for program providers. We appreciate their contribution to the study.

A special note of appreciation goes to our project steering committee and the project advisory committee whose names are noted in the front of this report for their generous contribution of time and expertise added to the quality and dimension of this study effort.

Others who assisted the study team with their ideas and efforts during various advisory committee meetings were Keith Adams, Assistant Dean, Cerritos College; Allan Holmes, Consultant, Research and Program Development, State Department of Education, Division of Vocational Education; and Nona Verloo, Consultant and Manager, VOICE, State Department of Education, Division of Vocational Education.

Among the many who assisted the study team and deserve our gratitude for assisting in the distribution and collection of the written and telephone surveys conducted during the study were: Lee Baxter, Administrator, Vocational Education Division, San Mateo County Office of Education; Corrine Price, Director, Adult School, Salinas Union High School District; Chet Gromacki, Dean of Occupational Education, North Orange County Community College District; Clinton (Dick) Hamann, Director, Vocational Education and Employment Training Services, San Diego Community College District; Greg Ohanneson, Assistant Dean, Occupational Services, San Jose Community College District; and Earl Orum, Dean of Instruction, Yuba Community College. Without the assistance of these people, it would have been impossible to gather necessary information within the limited time frame for this study.

Our thanks to Les Harris, Dean of Occupational Education, Long Beach City College, and Dick Whiteman, Dean of Occupational Education and Projects, Cerritos College. Both were asked, but were unable, to serve on the project advisory committee. Nevertheless, both contributed heavily to the information that was obtained from the community colleges.

Our appreciation to all the persons who took the time to provide information or meet with the study team during interviews and on-site visits.

Preface

This report on the feasibility of the placement rate concept contains a body of knowledge about the limitations and uses of the placement rate concept for comparing and assessing vocational and job training programs offered by different program providers in California.

The purpose of the report is to present a synthesis of information, key findings, and conclusions that serve as the foundation for the nine major recommendations.

Several factors regarding this report and the procedures leading to it should be noted. First, the issues surrounding the placement rate concept evoked emotional as well as rational responses from those who provided information during interviews and group meetings. In drawing conclusions, attitudinal information was considered by the study team but was balanced by a careful examination of factual data.

Selected comments from persons contacted during the study appear in the text of the report to illustrate the range of attitudes toward certain topics.

Second, this study cut across many state and local agencies involved with vocational education and job training programs. Historically, some of these agencies have had difficulty communicating and cooperating with each other because of differing missions and philosophies. Variations in agency perspective and function added to the complexity of finding common ground for agreement about placement concepts, related working definitions, and program outcomes.

Third, the study involved seven different program providers or funding agencies. Due to this, the suggested definitions and study recommendations are broad in nature so that they can be applicable to all. The study results provide direction for these respective agencies to examine their current policies and practices pertaining to collection and compilation of placement information.

ORGANIZATION OF THE REPORT

The report is divided into three parts. Part I, the executive summary report, is intended to stand alone in presenting major research questions, key findings and conclusions, and recommendations. Four figures are presented. Figure 1 explains the definitional and operational limitations of the placement rate concept as a means of comparing or assessing program performance. Figure 2 illustrates the technical limitations of state-level data systems as a means of comparing placement rates among the seven program providers included in this study.

Student follow-up was determined to be the most widely used means for obtaining placement data and other information about postprogram outcomes. Figure 3 provides guidelines on six essential components for a comprehensive student follow-up system.

Figure 4 presents a conceptual model for viewing three types of student impacts and program outcomes of vocational education and job training programs. The model shows the relative importance of educational, employment preparation, and economic impacts on students and provides suggested measurable program outcomes that can be used to determine the effectiveness of such programs.

Part II of the report contains technical information. It is divided into four sections. The first section explains the project objectives, procedures, and major findings of the study. The second section deals with the four criteria used to determine the feasibility of the placement rate concept—technical, definitional, operational, and philosophical. The third section contains major findings and conclusions related to each of the four criteria used to analyze the hard data and attitudinal information gathered during the study. The fourth section explores various uses and alternatives to the placement rate concept for program planning and evaluation.

Part III contains appendix materials—names of those interviewed, institutions from which information was received and a copy of the instrument. A glossary of acronyms appears on the last page of the report.

Part One The Executive Summary Report

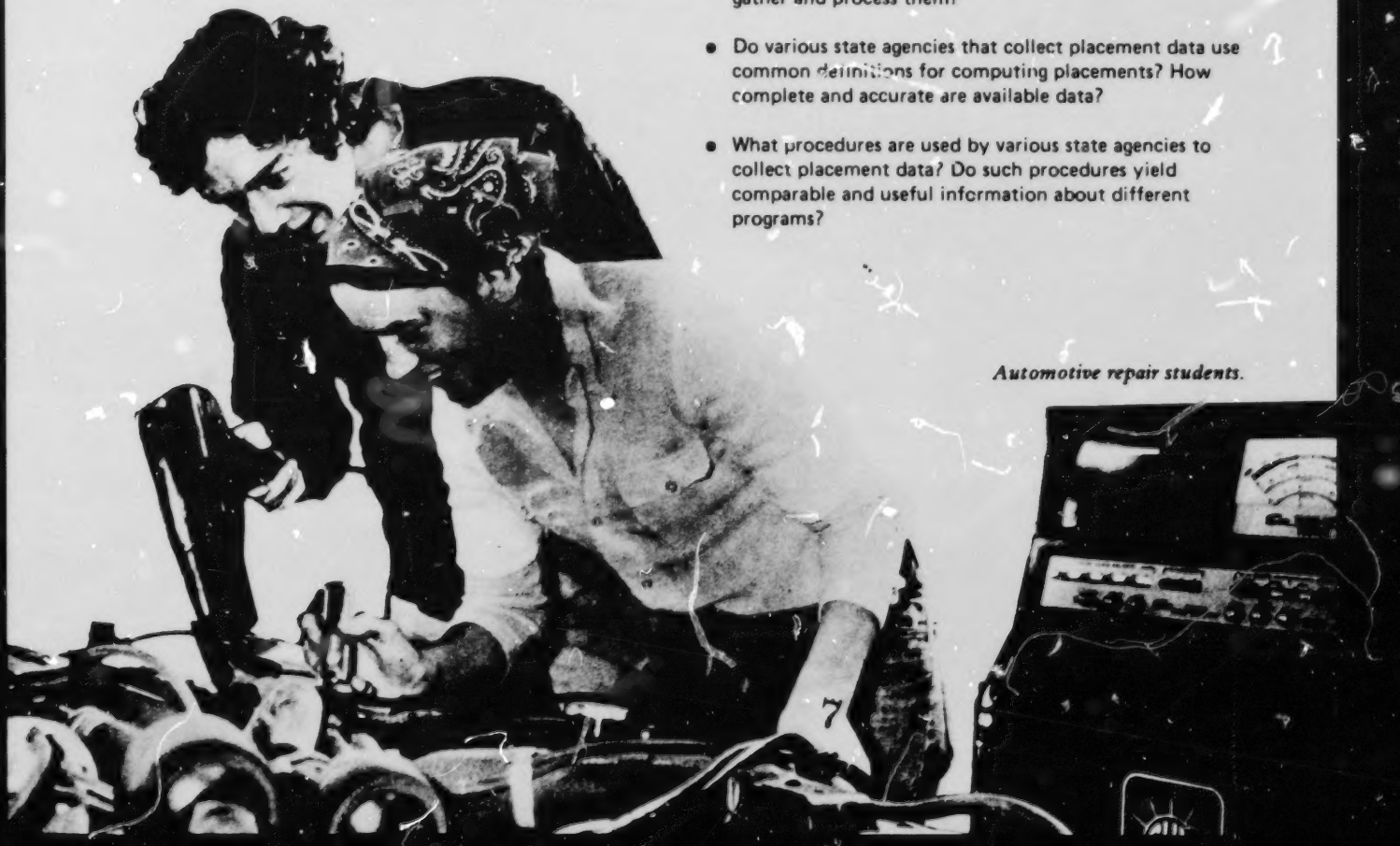
There is a growing awareness that quality education affects the economic well-being of individuals as well as that of the state or nation. A large body of research points clearly to the major role of vocational education in the preparation of people for work. Most people agree that the logical outcome of vocational education and employment training is entry employment or some change in the status of those who already work. However, other intervening student impacts and program outcomes rise in importance and legitimacy depending on the type and level of training, the characteristics and needs of the persons receiving training, and the labor market opportunities that exist in a given locality and time.

The issues surrounding the intended and expected outcomes of vocational education and job training are complex. The general public, as well as the experts, hold widely divergent views about what constitutes program effectiveness and how to measure it. In the face of such complexity, people seek a simple and quantitative indicator of program success. In vocational education and job training programs, this indicator becomes an attempt to measure the number of persons who receive training and find work—the placement rate concept.

The key question is, can the placement rate concept be used to compare the effectiveness of vocational education and job training programs offered by different types and levels of program providers? For example, if 25 percent of the trainees in a high school program find work and 35 percent of those in an adult vocational education program find work, is one more effective than the other? In order to answer the question of comparability, a joint venture among the California Occupational Information Coordinating Committee, the California State Department of Education, the California State Employment Development Department, and the California Community Colleges was undertaken which led to this study funded by the Chancellor's Office, California Community Colleges.

As part of the goal of determining the feasibility of the placement rate concept, answers to the following questions were sought during the five-month study that began in May 1984.

- Do various state agencies responsible for vocational and training programs collect information necessary to determine program outcomes and make program comparisons? If so, where are such data stored and what agencies gather and process them?
- Do various state agencies that collect placement data use common definitions for computing placements? How complete and accurate are available data?
- What procedures are used by various state agencies to collect placement data? Do such procedures yield comparable and useful information about different programs?



Automotive repair students.

- What part does placement rate information play in program planning by state and local agencies? What other information is needed to plan and assess vocational programs?

- What factors besides job placement rates should be considered in assessing vocational and job training program effectiveness? Is the placement rate an indicator of program quality?

- What uses of and alternatives to the placement rate concept are beneficial to program planning at state and local levels?

These questions provided the general framework for design of the study and collection of information. Procedures used by the study team included the following activities:

1. An extensive review of the literature
2. Contacts with seven other states to identify trends and uses of the placement rate concept
3. A review of state and local data collection systems and definitions for placement
4. A written and telephone survey of program providers to identify definitions, procedures, and practices for obtaining and using placement rate data
5. Meetings held with eight professional groups and organizations around the state
6. On-site visits to 16 program providers or agencies concerned with vocational education or job training in the state to discuss study issues
7. Personal or telephone interviews with 149 persons representing 15 state and local agencies involved with or concerned about the impact of vocational and job training programs on students, employers, or the economy of the state.

These study activities were conducted under the direction of a steering committee comprised of four members, one each from the California Occupational Information Coordinating Committee (COICC), the Chancellor's Office of the California Community Colleges (COCCC), the State Department of Education (SDE), and the Employment Development Department (EDD). The project monitor was from the COCCC. In addition, there was an approved project advisory committee comprised of representatives from various state and local agencies. This group met four times during the project to review information, help interpret study findings, and develop study recommendations.

Four criteria were used to assess feasibility of the placement rate concept. These were: 1) technical capability, i.e., are required state data collection systems in place; 2) definitional, i.e., are common definitions for essential data elements used; 3) operational, i.e., what are the target populations, program characteristics, and modes of program entry for each program provider; and 4) philosophical and political considerations, i.e., what issues are at stake in the use of job placement rates as a means of comparing and assessing vocational and job training programs.

STEPS IN THE ANALYSIS

The first steps in determining feasibility were to define the placement rate concept and examine current vocational education legislation (Perkins Act, 1984) and the JTPA (1982) to determine common objectives and expected outcomes. Although these two pieces of legislation have different origins and use different language, they share many common expectations in the training, retraining, and upgrading of the work force. The Perkins Act encompasses the employed as well as unemployed persons. JTPA is aimed at the economically disadvantaged. Both place emphasis on program outcomes.

For purposes of the study, the placement rate concept was defined as *the number of students who received training and are available for work after training, divided into the number of such students who find work.*

A review of federal legislation and definition of the placement rate concept led to the need to carefully define the relationship as well as the differences between vocational education and job training.

It was determined that *vocational education involves the preparation of people for entry-level employment, upgrading, as well as for career advancement and change.* It may include broader educational experiences to help individuals achieve longer-range career aspirations as well as immediate occupational goals.

Job training is generally intensive, job specific, and of short duration and does not address the broader objectives of career advancement. The definitions for these terms were essential to the analysis of feasibility of the placement rate concept.

The follow-up systems of seven state program providers or funding agencies were reviewed to identify the availability of comparative placement data. The state systems included: secondary schools (FUSE); ROP/C; adult schools; community colleges; JTPA-funded programs; Department of Rehabilitation; and private postsecondary schools under the auspices of the State Department of Education (SDE).

Information, ideas, and suggestions were collected from program providers, state agencies concerned with vocational programs and labor market information, and experts within California and other states. The results of this extensive data collection process were analyzed by the study team and reviewed by the project steering and advisory committee. Based on this process, major study findings and conclusions were formulated as the rationale for the study recommendations.

Vocational instruction should concern itself with "noneconomic returns" rather than the skill-specific approach.

Harry F. Silberman
Professor of Education
University of California at Los Angeles

SUMMARY OF KEY STUDY FINDINGS AND CONCLUSIONS

The following 18 key findings and conclusions provide the basis for the study recommendations. The reader can refer to the corresponding number of each conclusion summarized here in Part II of the report for detailed information.

Several conclusions refer to figures which illustrate the points made or which tie to recommendations based on the study findings and conclusions. The figures are preceded by short explanatory statements.

1. The Perkins Act and JTPA share many common objectives related to training, retraining, and upgrading workers. The Perkins Act includes employed workers as well as the unemployed, while JTPA places emphasis on the unemployed and economically disadvantaged. Both give strong emphasis to program outcomes.

2. Federal vocational education legislation has objectives for training and upgrading employed persons, but little attention is given to this function by the VEDS data collection system for determining student impacts or program outcomes.

3. During the past five decades, enormous technological breakthroughs, social changes, and political changes have altered the structure of industries, created and eliminated whole occupational fields, and revised the competencies required to enter, hold, and advance in employment. These changes have set the stage for people to change careers several times during their working lifetime.

4. The current definition of the placement rate concept is too narrow and limited for determining all of the positive outcomes for students or trainees of vocational education or job training programs. See Figure 1.

> FIGURE 1: Limitations of the Placement Rate Concept Formula for Determining Placement Rates in Vocational and Job Training Programs
>
> Figure 1 summarizes the major concerns of persons interviewed from various levels and types of vocational education and job training programs in the state. When definition of the placement rate concept was discussed with persons interviewed, reactions were obtained to four different elements. These were a) what students are included in the formula; b) what constitutes work; c) how should the number of students available for work be determined; and d) in addition to job placement, what other positive program outcomes are important.

5. Use of the placement rate concept for making comparisons among different program providers is not technically feasible at the current time because inconsistencies occur in the current state collection systems and there is a lack of commonly used data elements. See Figure 2.

> FIGURE 2: Comparison of State-Level Placement Data
>
> Figure 2 shows that four of the seven program delivery or funding systems do not compile information at the state level that can be used to identify placement rates by type of program. It should be noted that Department of Rehabilitation counselors do a follow-up on all clients to identify their status, but information related to training received by type of deliverer and jobs held is not aggregated at the state level.
>
> Much work has been done to improve the data collection systems for the Follow-up of Students and Employers (FUSE) at the secondary level and the ROP/Cs since 1981-82, and the Community Colleges have supported further studies of students and employers. It still remains that the differences in defining programs and methods of follow-up make state-level comparisons of placement data across agencies unreliable and invalid.

6. The use of placement rates for local program planning is more appropriate than at the state level, but they should be used in conjunction with other sources of information about the demand for vocational programs in the local or major labor markets served by the program provider. This information might include regional labor market information generated by EDD, Bureau of Labor Statistics data, and employer sources.

7. The seven placement options that met VEDS requirements do not provide an appropriate option for determining impacts and program outcomes for students who were employed at the time they enrolled in their programs. There is a need for an eighth postprogram option to cover students taking vocational and job training programs for *career improvement*.

8. In order to be feasible for state or local levels, standardized definitions for each *postprogram placement option*, *program*, *completer*, and *leaver* must be agreed upon and adopted to carry out student follow-up studies, data reporting, and analysis of program outcomes.

9. The mission of the agencies offering vocational programs and job training influences the objectives of specific programs and the operational manner in which such programs are delivered. The more narrow the mission of the program provider, the more likely that employment-related student outcomes can be used as a means of determining the effectiveness of a given vocational or job training program, in a given area, at a given time.

FIGURE 1

LIMITATIONS OF PLACEMENT RATE CONCEPT FORMULA FOR DETERMINING PLACEMENT RATES IN VOCATIONAL AND JOB TRAINING PROGRAMS

Definition of JOB PLACEMENT RATE: The number of students who received vocational training and are AVAILABLE FOR WORK, divided into the number of such students who FIND WORK.

BASED ON THE EXISTING DEFINITIONS AND VEDS CATEGORIES, THE FOLLOWING PROCESS WOULD BE USED TO COMPUTE THE PLACEMENT RATE FOR A GIVEN VOCATIONAL PROGRAM:

$$\frac{\text{NUMBER OF STUDENTS (a)* WHO FIND WORK (b)*}}{\text{NUMBER OF STUDENTS AVAILABLE FOR WORK (c)*}} = \text{JOB PLACEMENT RATE (d)*}$$

---

*In relation to the letters shown in parentheses, the current definition of a placement rate:

a. Does NOT indicate whether students are leavers or completers of programs.

b. Does NOT define time limits within which work is found.
Does NOT indicate whether work found should include unrelated and partially related work as well as related work.
Does NOT indicate how long such work must be held by the student after finding work.

c. Does NOT give consideration to employment status of students at the time they enroll in a program.
Does NOT consider student goals or reasons for enrolling in a program.
Does NOT consider student characteristics or learning needs.
Does NOT ensure that a uniform formula is used for deriving those available for work.

d. Does NOT include any provision for other positive postprogram options such as continued education or further training for students.
Does NOT consider planned program objectives.
Does NOT give consideration to local, regional, or state economic conditions affecting employment opportunities.
Does NOT give consideration to economic conditions, business cycles, seasonal employment patterns, or other such factors.

NOTES: Definition of placement rate taken from Project Specification (Request for Proposal No. CC-3-3-157). Notes about limitations of current method for computing placement rates were derived from interviews and surveys conducted by Carvell Education Management Planning, Inc., during the project.

Source: Carvell Education Management Planning, Inc., Los Altos, CA.

FIGURE 2

COMPARISON OF AVAILABILITY OF PLACEMENT DATA FROM STATEWIDE FOLLOW-UP SYSTEMS

ELEMENTS IN STATE DATA BASES	1981-82 Student Information Collected on Program COMPLETERS*						
	ROP/C PROGRAMS	SECONDARY VE PROGRAMS (FUSE)	ADULT VE PROGRAMS	COM. COLLEGE VE (VEDS)	JTPA-FUNDED PROGRAMS	REHABILITATION TRAINING PROG.	PRIVATE POSTSECOND. VE & TRAINING PROG.
A) NUMBER OF COMPLETERS IN STATE	Universe reported	Universe extrapolated from sample data	Placement & follow-up data not reported to state	Universe reported	Not reported to state by type of training or provider	Does not deliver VE programs—uses other deliverers	Currently not collected by the state
B) NUMBER INCLUDED IN FOLLOW-UP	Universe	c. 25% sample of universe	Not required	c. 25% sample of universe	Placements aggregated	Not required	Not required
C) NUMBER OF RESPONSES USED	Universe, less non-respondents	Usable returns	NA	Sample, less nonrespondents	NA	NA	NA
D) NONRESPONDENTS OR STATUS UNKNOWN	25% of universe	72% of sample	NA	74% of sample	NA	NA	NA
E) NOT AVAILABLE FOR WORK:	51% of respondents	24% of respondents	NA	22% of respondents	NA	NA	NA
. MILITARY SERVICE . IN SCHOOL/FURTHER TRAINING NOT IN LABOR FORCE/NOT SEEKING WORK . OTHER REASONS	(32% were in school, not working; not known how many in school and working)	(62% of respondents were in school; of this, those employed were counted in employment categories below)		(15% were in school, not working; not known how many were in school and working)			
F) PERCENT OF RESPONDENTS AVAILABLE FOR WORK	49%	76%	NA	78%	NA	NA	NA
G) THOSE AVAILABLE FOR WORK:							
. IN RELATED WORK TO TRNG	48%	27%	NA	74%	NA	NA	NA
. IN UNRELATED WORK TO TRNG	37%	44%	NA	19%	NA	NA	NA
. UNEMPLOYED, SEEKING WORK	15%	26%	NA	7%	NA	NA	NA

* COMPLETERS for each reporting system were defined by local reporting agencies following VEDS guidelines, but no assurance can be given that such a definition was followed consistently by all reporters.

- NA = not available or not reported to the state.
- Information about each system was obtained from the respective agencies at state and local levels during August 1984.
- Information was obtained from agriculture vocational educators regarding the follow-up system being developed in compliance with SB 187. Student follow-up data not yet available.

Source: Compiled by Carvell Education Management Planning, Inc., Los Altos, CA, from data produced by applicable state agencies, September 1984.

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10. The characteristics of the student populations served by program providers have implications on the type and extent of assessment and counseling services that must be provided. Determination of interest, aptitudes, or the need of remedial or basic skills as a condition of proper program placement is an important factor in meeting the needs of the student and helping to enhance employment placement prospects.

11. The use of screening procedures for entry into vocational programs and job training can have an impact on student chances for success in the program and positive postprogram placement outcomes.

12. Without information about the educational and employment status of vocational students at the time they enter a program and evidence of student intentions (goals) for taking their training programs, accurate, complete, and useful information about the impact of the programs cannot be determined, especially for postsecondary-level students.

13. With different objectives, program titles, and program coding systems used by different programs providers, it is difficult, if not impossible, to compare the level or sophistication of vocational programs among various agencies because program structure can range from one course to extensive and intensive training experiences covering several years.

14. Student follow-up systems must contain common data collection components and formulae for determining placement rates if they are to provide adequate placement information for program planning and evaluation or comparison of results among various programs *at the local level or within a given delivery system.* See Figure 3.

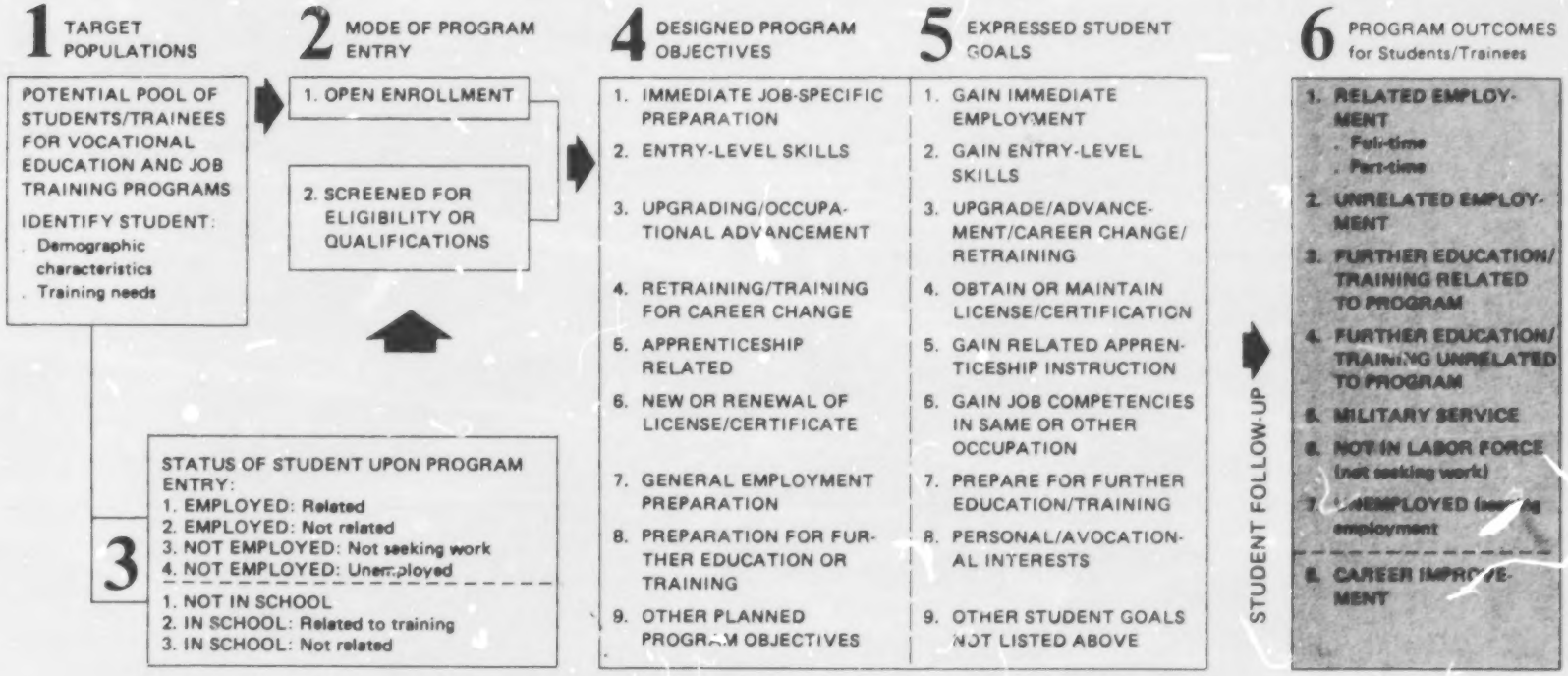
FIGURE 3: SPECIAL NOTATION

Figure 3 shows the relationship between six essential components of a comprehensive follow-up system. The follow-up process begins with the identification and classification of 1) student characteristics and needs; 2) the mode of program entry, i.e., what screening procedures and assessments are used; and 3) identification of the student's employment and educational status at time of entry into the program. Three other components are also essential. They are 4) a clear statement of the program objectives which are designed by the program providers; although individual program providers may declare several objectives and use their own language for stating them, most fall into the general categories shown on the figure; 5) even though student goals may change or be uncertain, they are an important factor in determining the impact of programs; some indication of the expressed student goals is important to measuring student impacts; this information may be obtained as part of the student assessment program during program enrollment or as part of the follow-up process; 6) the final factor in the model is the identification of program outcomes for former students and trainees. Eight options are suggested for use by this study. In addition to determination of placement outcomes, other items should be included in student follow-up, such as job satisfaction, salary data, and so on.

Dental student.

FIGURE 3

CONCEPTUAL MODEL FOR A COMPREHENSIVE STUDENT FOLLOW-UP SYSTEM TO DETERMINE PROGRAM OUTCOMES


1 TARGET POPULATIONS
POTENTIAL POOL OF STUDENTS/TRAINEES FOR VOCATIONAL EDUCATION AND JOB TRAINING PROGRAMS
IDENTIFY STUDENT:
. Demographic characteristics
. Training needs
2 MODE OF PROGRAM ENTRY
1. OPEN ENROLLMENT
2. SCREENED FOR ELIGIBILITY OR QUALIFICATIONS
3
STATUS OF STUDENT UPON PROGRAM ENTRY:
1. EMPLOYED: Related
2. EMPLOYED: Not related
3. NOT EMPLOYED: Not seeking work
4. NOT EMPLOYED: Unemployed
1. NOT IN SCHOOL
2. IN SCHOOL: Related to training
3. IN SCHOOL: Not related
Employment and educational status of student to be determined upon program entry or before program departure
4 DESIGNED PROGRAM OBJECTIVES
1. IMMEDIATE JOB-SPECIFIC PREPARATION
2. ENTRY-LEVEL SKILLS
3. UPGRADING/OCCUPATIONAL ADVANCEMENT
4. RETRAINING/TRAINING FOR CAREER CHANGE
5. APPRENTICESHIP RELATED
6. NEW OR RENEWAL OF LICENSE/CERTIFICATE
7. GENERAL EMPLOYMENT PREPARATION
8. PREPARATION FOR FURTHER EDUCATION OR TRAINING
9. OTHER PLANNED PROGRAM OBJECTIVES
Inform student/trainee about planned program objectives
5 EXPRESSED STUDENT GOALS
1. GAIN IMMEDIATE EMPLOYMENT
2. GAIN ENTRY-LEVEL SKILLS
3. UPGRADE/ADVANCEMENT/CAREER CHANGE/RETRAINING
4. OBTAIN OR MAINTAIN LICENSE/CERTIFICATION
5. GAIN RELATED APPRENTICESHIP INSTRUCTION
6. GAIN JOB COMPETENCIES IN SAME OR OTHER OCCUPATION
7. PREPARE FOR FURTHER EDUCATION/TRAINING
8. PERSONAL/AVOCATIONAL INTERESTS
9. OTHER STUDENT GOALS NOT LISTED ABOVE
Determine student/trainee expressed goals for taking vocational program prior to program departure
STUDENT FOLLOW-UP
6 PROGRAM OUTCOMES for Students/Trainees
1. RELATED EMPLOYMENT
. Full-time
. Part-time
2. UNRELATED EMPLOYMENT
3. FURTHER EDUCATION/TRAINING RELATED TO PROGRAM
4. FURTHER EDUCATION/TRAINING UNRELATED TO PROGRAM
5. MILITARY SERVICE
6. NOT IN LABOR FORCE (not seeking work)
7. UNEMPLOYED (seeking employment
8. CAREER IMPROVEMENT
Follow-up completers and students certified by program provider as having gained marketable skills

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15. Criteria for assessing vocational education and job training should include three areas of student impact and measurable program outcomes. These are educational, employment preparation, and economic. The relative importance of each will change depending on the type and level of program and the designed program objectives. See Figure 4 and supplemental information for further explanation of student impacts and program outcomes.

FIGURE 4: Model Illustrating Relative Importance of Vocational and Employment Training Program Impacts and Student Outcomes

Figure 4 presents a conceptual model that illustrates the changing importance of educational, employment preparation, and economic impacts on students and the measurable outcomes that can be used to assess program effectiveness. This model covers all vocational and job training regardless of level and type. The model shows that in some introductory or general vocational programs, the relative importance of educational impacts for students is high compared to the economic impacts. In job specific training, the reverse would be true.

The conceptual model can be used by program providers to design program objectives and construct methods for collecting and analyzing information for program evaluation.

Supplemental information to Figure 4 shows how program outcomes can be measured.

The development of problem-solving and basic skills, e.g., communication—reading, writing and speaking—and computation, is appropriate for both secondary and postsecondary vocational and job training programs. Development of employability skills, e.g., career decision-making, resume writing, job search, interviewing, work attitudes, ability to hold a job, is important as well as the development of specific occupational skills, e.g., typing, machine operation, and so on. This study and the others indicate that people believe the elements of general education, employability, and specific job training have different emphasis at each level. No conceptual framework for differentiating and weighing the relative importance of each was found among the agencies included in this study. Without such a framework, measuring program outcomes tends to focus upon economic impacts, e.g., job placement, removal from public aid.

16. Even though some of the alternatives investigated as part of this study would provide partial data needed to project occupational opportunities, none would, taken by itself, provide all the information necessary for program planning and evaluation. Some alternatives would not provide data related to specific program providers; others would not be related to definable labor markets and job opportunities. None would provide information that could lead to changed program content or instructional methods which would result in program improvement.

17. Data are not available which reflect all costs of obtaining placement data and other information needed for ongoing program planning, improvement, and evaluation at either the local or state level.

18. Any statewide system to assess outcomes from vocational education and job training so that comparisons among programs could be made would require a massive manipulation of data which would increase costs at both state and local levels.

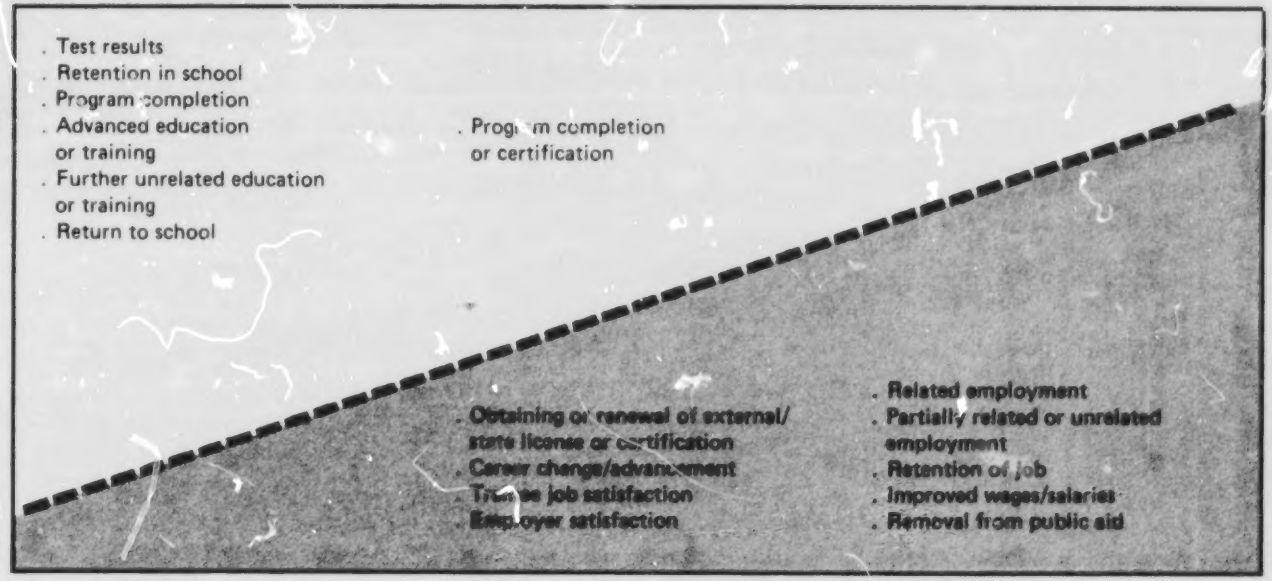
There is much discussion these days about making adult education programs and other institutions responsible for the people they train. . . . if we don't place people on the job they were trained for . . . we will not get paid. . . . This virtually puts us in a position where we cannot take the risk of starting new vocational classes . . . (as we) may put ourselves into a position of having to return monies which we may have expended.

Director, Adult School
Southern California

Machine technology student.

FIGURE 4

MODEL ILLUSTRATING RELATIVE IMPORTANCE OF VOCATIONAL AND EMPLOYMENT TRAINING PROGRAM IMPACTS AND STUDENT OUTCOMES


RELATIVE IMPORTANCE OF STUDENT IMPACTS AND OUTCOMES
TYPE AND LEVEL OF VOCATIONAL PROGRAM
Introductory, Survey or General Courses and Programs
Movement from general employment preparation to narrower job specific skill training
Job Specific Training
. Test results
. Retention in school
. Program completion
. Advanced education or training
. Further unrelated education or training
. Return to school
. Program completion or certification
. Obtaining or renewal of external/state license or certification
. Career change/advancement
. Trainee job satisfaction
. Employer satisfaction
. Related employment
. Partially related or unrelated employment
. Retention of job
. Improved wages/salaries
. Removal from public aid
EDUCATIONAL IMPACTS
. Basic skills
. Interest in school
. Educational options
. Career exploration
. Labor market knowledge
. Problem-solving skills
EMPLOYMENT PREPARATION IMPACTS
. Employability skills
. Entry-level job skills
. Improved job/occupational skills and competencies—self-confidence
ECONOMIC IMPACTS
. Marketable job skills
. Competitiveness in labor market/workplace—shortened learning curve
. Career change/advancement
. Prospects for increased earnings

NOTE: Shaded area illustrates the increasing relative importance of Economic Impacts for Job Specific Training.

Source: Concept presented by Carvell Education Management Planning, Inc., Los Altos, CA, September 1984.

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SUPPLEMENTAL INFORMATION FOR FIGURE 4

CONCEPTUAL MODEL OF POTENTIAL STUDENT IMPACTS AND OUTCOMES BY TYPE AND LEVEL OF VOCATIONAL AND JOB TRAINING PROGRAM

TYPE AND LEVEL OF PROGRAMS BY PROGRAM PROVIDERS	POTENTIAL PROGRAM IMPACTS FOR STUDENTS	POSSIBLE MEASURABLE PROGRAM OUTCOMES
I. EDUCATIONALLY RELATED IMPACTS AND OUTCOMES FOR STUDENTS		
SECONDARY AND SELECTED POSTSECONDARY-LEVEL PROGRAMS: • High School Vocational Education • ROP/C Preparatory Training • JTPA-Funded Youth Programs • Selected Community College Vocational Programs • Selected Adult VE Programs • Others	• Acquisition of BASIC SKILLS in communications and math • Increased interest in school • Better understanding of educational options • Improved awareness of occupational or career options • Improved knowledge of economic and labor market conditions • Improved problem-solving skills	• Test results • Retention in school • Returning to school • Program completion • Continuing in more advanced education or training RELATED to training • Continuing in advanced education or training NOT RELATED to training
II. EMPLOYMENT PREPARATION RELATED IMPACTS AND OUTCOMES FOR STUDENTS		
SECONDARY AND POSTSECONDARY-LEVEL PROGRAMS: • High School Vocational Education • ROP/C Preparatory and Supplemental Training • Community College Vocational Education and Job Training • Adult Vocational Education Programs • JTPA-Funded Youth and Adult Programs • Others	• Acquisition of employability skills (job search, resume writing, interviewing, etc.) • Acquisition of entry-level job skills • Improved job/occupational skills and competencies • Improved self-confidence related to work competencies and employability	• Program completion/certification • Obtaining/maintaining external/state license or certification • Occupational advancement or desired career change • Improved job satisfaction for students • Employer satisfaction with students hired from training program
III. ECONOMIC IMPACTS AND OUTCOMES FOR STUDENTS		
SECONDARY AND POSTSECONDARY-LEVEL PROGRAMS: (Same as those noted for Employment Preparation)	• Acquisition of marketable job skills • Improved occupational competencies • Improved competitive position in labor market or in workplace—shortened learning curve • Improved prospects for career advancement • Improved prospects for increased earnings on the job	• Placement in occupations RELATED to training • Placement in jobs partially or NOT RELATED to training • Retention of desired employment • Improved wage/salary levels • Removal from Public Aid

Source: Chart compiled by Carvell Education Management Planning, Inc., Los Altos, CA. September 1984.

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MAJOR RECOMMENDATIONS

The following recommendations are derived from the extensive study of the issues related to the feasibility and use of the placement rate concept. These recommendations are few in number (nine) and do not address other potential positive program outcomes that were beyond the scope of the study. The recommendations are self-explanatory when the major study conclusions have been read. They are directed to all state agencies involved in providing or supporting vocational and job training programs and have implications for local program providers in their own efforts to plan and assess the programs under their auspices.

1. PLACEMENT IS A VITAL STUDENT OUTCOME FOR VOCATIONAL EDUCATION AND SHOULD BE USED AS ONE OF THE MAJOR CRITERION FOR PROGRAM PLANNING AND ASSESSMENT BY EACH PROGRAM PROVIDER.

2. PLACEMENT RATES SHOULD BE INCLUDED AS A SEPARATE ITEM IN LOCAL AND STATE PROGRAM EVALUATIONS—AND THE FORMULA BY WHICH THE RATES ARE DERIVED SHOULD BE CLEARLY STATED.

3. THE STATE LEGISLATURE AND FUNDING AGENCIES SHOULD DEVELOP AND IMPLEMENT INCENTIVES AND TECHNICAL RESOURCES FOR LOCAL PROGRAM PROVIDERS FOR IMPROVING THE PLACEMENT FUNCTION IN VOCATIONAL EDUCATION.

4. STATE AGENCIES SHOULD ADOPT THE POLICY THAT COLLECTION OF PLACEMENT INFORMATION SHOULD PRIMARILY SERVE THE PLANNING NEEDS OF LOCAL PROGRAM PROVIDERS.

5. OTHER POSITIVE PROGRAM OUTCOMES ARE IMPORTANT, BUT IN TERMS OF THE PLACEMENT RATE CONCEPT, EIGHT STUDENT OUTCOMES SHOULD BE USED FOR DETERMINING THE POST-PROGRAM STATUS OF FORMER VOCATIONAL AND JOB TRAINING STUDENTS.

6. THE EIGHT STUDENT OUTCOMES RECOMMENDED ARE:
   a. RELATED EMPLOYMENT
   b. UNRELATED EMPLOYMENT
   c. RELATED ADVANCED EDUCATION/ TRAINING
   d. UNRELATED ADVANCED EDUCATION/ TRAINING
   e. MILITARY SERVICE
   f. NOT SEEKING WORK/NOT IN THE LABOR FORCE
   g. UNEMPLOYED AND SEEKING WORK
   h. CAREER IMPROVEMENT (FOR PERSONS EMPLOYED AT ENTRY INTO VOCATIONAL EDUCATION PROGRAMS).

7. COMPONENTS OF A COMPREHENSIVE STUDENT FOLLOW-UP SYSTEM SHOULD INCLUDE INFORMATION ON SIX FACTORS:
   a. TARGET POPULATIONS
   b. MODE OF PROGRAM ENTRY
   c. EMPLOYMENT/EDUCATIONAL STATUS AT TIME OF ENTRY
   d. DESIGNED PROGRAM OBJECTIVES
   e. EXPRESSED STUDENT GOALS
   f. EIGHT DEFINED STUDENT POST-PROGRAM OUTCOMES.

8. STATE AGENCIES SHOULD REVIEW POLICIES RELATED TO DATA COLLECTION AND DETERMINE APPROPRIATENESS OF EXISTING SYSTEMS AND/OR THE MERITS OF IMPLEMENTING SUCH SYSTEMS WHERE THEY DO NOT CURRENTLY EXIST.

9. PLACEMENT INFORMATION IS NOT THE ONLY IMPORTANT INPUT FOR PROGRAM PLANNING—OTHER LABOR MARKET INFORMATION, SUCH AS WAGE RATE TRENDS, UNEMPLOYMENT BY OCCUPATION, PROJECTIONS OF LABOR MARKET DEMAND, IS NECESSARY; THEREFORE, STRONGER LIAISON BETWEEN EDD AND PROGRAM PROVIDERS SHOULD BE ESTABLISHED FOR GENERATION OF SUCH DATA FOR LOCAL UTILIZATION.

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CONCLUDING STATEMENT

This study dealt with the feasibility and use of the placement rate concept, methods used to improve collection of placement data, and how it and alternatives for obtaining labor market information about job opportunities might be used by state agencies and local program providers. The study demonstrates the interdependency between the use of labor market information and input from former students and the employment community to improve vocational and job training programs. But none of this will actually improve placement rates unless the information is transformed into action.

Improvement in the collection and use of placement data must be accompanied by ongoing professional development activities and guidelines from the state to help ensure consistency and compatability of data. The follow-up model outlined in Figure 3 and recommended in this study will help to assure necessary consistency. But placement data alone are not sufficient for program planning and assessment. Concerted efforts should be undertaken to identify which information is most germane for both state and local planning.

Myriad external factors affect job placements in a given occupational field, locality, or period of time, but research shows that placement rates are enhanced by provision of a comprehensive placement program for vocational students. This program may be provided in cooperation with other agencies, but if a goal of vocational and job training programs is to improve student job placements, both program providers and the state must give comprehensive placement programs proper attention and funding support.

It is hard work to place students, but it is part of the responsibility of vocational education.

Mel Barlow
AVA Historian (retired)

Positive student outcomes in vocational and job training programs may include more than related job placement. The study has shown that vocational education and job training can have a broader range of educational, employment preparation, and economic impacts on students. The relative importance of these student impacts changes with the type and level of program which was illustrated in Figure 4. Further work may be needed to refine the model, but the idea that emphasis can be placed on measurable student outcomes and that different methods of data collection can be used to measure program outcomes has been shown. The implication of this model is that program providers state clearly the designed objectives of the programs they offer and that student intentions for taking the programs be determined.

Word processing class.

Part Two The Technical Report

1. Introduction

PURPOSE AND BACKGROUND OF THIS STUDY

The purpose of this study was to examine the feasibility and uses of the placement rate concept as a means of comparing and assessing vocational and job training programs offered by various program providers in California.

For purposes of this study, the placement rate concept is defined as *the number of students who received training and are available for work after training, divided into the number of such students who find work.*

The need for this study was founded in the federal legislation (Education Amendments of 1976, PL 94-482) that established the National Occupational Information Coordinating Committee (NOICC) and concomitant state-level coordinating committees. The latter was formed in California in 1978 as the California Occupational Information Coordinating Committee (COICC). This committee is currently comprised of representatives from seven state agencies: Employment Development Department (EDD), State Department of Education (SDE), California State Job Training Coordinating Council, Department of Rehabilitation, Chancellor's Office—California Community Colleges (COCCC), the Council for Private Postsecondary Educational Institutions, and the Department of Commerce.

The COICC is currently operating within the mandates of three separate pieces of legislation: PL 94-482 (cited above) requiring an occupational information system (OIS); SB 178 (state legislation) requiring that COICC submit an Annual Plan to the State Job Training Coordinating Council on the design, implementation, and funding of an OIS; and PL 97-800, the Job Training Partnership Act, Section 125, which requires COICC to coordinate an OIS.

The development of an OIS in the state began prior to the 1976 federal legislation. In the early 1970s, the California Manpower Management Information System (CMMIS) endeavored to establish a supply-and-demand ratio that would assist planners of vocational and job training programs to control the size, start-up, and intensity of the preparation of people for identified occupations. CMMIS then evolved from a state-funded project to the federally mandated one carried out by the COICC which had expanded responsibilities for promoting the development and improvement of occupational and career information used by program planners, counselors, and students. These OIS components included supply data, demand data, occupational descriptions, availability of training programs, and financial aid information.

The original supply/demand model consisted of 1) occupational demand information that pertained to the number of job openings within a defined geographic area over a given period of time; 2) occupational supply data related to the number of persons working, seeking work, or being trained for specific occupations over a period of time; and 3) supply and demand analysis to transform needs into a format usable for local planning. (California Employment Development Department, LMI Subcommittee)*

The concept of matching supply of trained students for a given occupation with local, regional, or state labor market demand is encumbered with numerous difficulties ranging from lack of accurate data for either side of the equation to the fact that many training programs prepare students for more than one type of employment. Interoccupational mobility and reentry of people to the labor force after leaving for some period of time also complicates the analysis of net training-related job openings. (Young) Efforts to make the supply/demand model operate have been hampered by technical difficulties and the lack of data suitable for either supply or demand components.

A review of the role of COICC and OIS needs in the state revealed several factors that led to this study of the placement rate concept. Among these were 1) program planners often did not have access to or did not know how to use labor market information (LMI); 2) better quality information about job placements was needed; and 3) placement information was useful for career guidance and counseling as well as for curriculum development and program planning. Part of the needs noted by various studies on these issues were met by the COICC publication of guidelines for use of LMI. (Connelly & Saxton) This study of the placement rate concept is another step in the direction of helping to improve program planning at both state and local levels.

PROJECT OBJECTIVES

Related to the project goal, eight specific objectives were pursued:

*All references noted throughout this report are listed alphabetically by author's name or publication title in the bibliography appearing in Appendix A.

1. To establish working definitions for placement outcomes
2. To apply defined placement outcomes to existing available data for different vocational program areas and levels
3. To assess the validity and comparability of existing placement data gathered and compiled by the state
4. To identify the source and content of data necessary to determine placement rates
5. To assess feasibility of the placement rate concept and/or its limitations
6. To determine the cost of implementing the placement rate concept should it be feasible
7. To document alternatives to the placement rate concept and their estimated costs
8. To prepare a final report containing findings, conclusions, and recommendations.

EXPECTATIONS OF VOCATIONAL EDUCATION AND JOB TRAINING PROGRAMS

Preparing youths and adults for entry or progression in the labor force is a fundamental precept of vocational education. However, such programs in public secondary and postsecondary schools are part of a broader educational mission which may benefit students in ways that cannot be measured until long after they have departed from formal education. In general terms, the mission of public schools is to provide educational experiences that enhance the intellectual development of students, convey societal values, and broaden the horizons and options of students. The educational process is intended to expand choices for the individual as well as serve the needs of a larger society.

As noted in later sections of this report, recent events and legislation have blurred the lines between vocational education and more specialized job training in the minds of some people concerned about the place and effectiveness of such programs in public education. This group is comprised of the general public and taxpayers, business and industry leaders, students of employment preparation programs at all levels, state and federal legislators, and the providers of such programs.

Despite some confusion about vocational education and its role in the educational process, the American public seems to support it as a valuable component of the public school curriculum. In the 1984 Gallup poll of public attitude toward public schools, 83 percent believed vocational education should be mandatory for noncollege-bound students and 37 percent felt it should be mandatory for college-bound youngsters. (Gallup) Other national studies of the public's expectations found that the major role of vocational education is to prepare people for the world of work and that the development of basic skills and employability skills is appropriate for vocational programs at both secondary and postsecondary levels. (Starr) Some researchers hold the opinion that the part vocational education plays in assisting students learn how to get a job may be as important as how to do a job. (Jacobson) This viewpoint appears to be supported by certain sections of current federal vocational education legislation.

FEDERAL INVOLVEMENT IN VOCATIONAL EDUCATION

Federal involvement with vocational education began with the Smith Hughes Act of 1917 and continued through the passage of the Vocational Education Act (VEA) of 1963 and subsequent amendments in 1968 and 1976. Nationally, federal financial support for vocational education at the local level was about 29 percent in 1966 and declined to less than 10 percent by 1980. In California, federal money comprised less than 5 percent of secondary and community college estimated expenditures in 1984. (California Annual Program Plan for Vocational Education, 1984-85) This point is important when one considers that California is the eighth-ranked economic entity in the world. It has a complex economic structure and labor market requirements that not only supersede other states but most nations of the world. Yet the picture of what is happening in vocational programs in California is drawn largely from reports that meet compliance requirements of the federal government rather than state planning needs.

Recent Vocational Education Legislation

From its inception, federal legislation has sought to improve the quality of vocational education programs, increase access to such programs for those who need it, and stimulate economic development through preparation and upgrading of the labor force. Most of the recent federal vocational education legislation embodies these intentions which also were basic to the 1917 legislation when only about one in five eligible youths was enrolled in high school. (Barlow)

The Carl D. Perkins Vocational Education Act of 1984 (Perkins Act) is intended to improve, modernize, and develop quality programs to meet the nation's current and future need for a work force with marketable job skills, improve productivity, and promote economic growth. In addition, the Perkins Act attempts to promote and achieve:

- *Access to vocational programs* for all groups, including special needs populations
- *Greater cooperation among public agencies* providing employment preparation *and the private sector*
- *Better academic foundations* for students
- *Provision of programs to train, retrain, and upgrade employed and unemployed workers* in new skills *for which there is a demand*
- Provision of *assistance for the most economically depressed areas* of a state *to raise employment and occupational competencies* of its citizens
- *Utilization of a full range of student support services* to achieve the goals specified by the Act
- Improvement of *consumer and homemaking education*
- *Establishment of national programs to meet designated vocational education needs and to strengthen vocational education research.*

This legislation was based on congressional belief that effective vocational programs are essential to the nation's future as a free and democratic society; that such programs should be administered where local control can be emphasized with a minimum of federal interference; and that better links between public school needs and private sector resources should be encouraged and implemented.

Job Training Partnership Act (JTPA)

While the Perkins Act relates to vocational programs conducted by public secondary and postsecondary institutions, corresponding federal legislation has been passed to deal with specific job preparation of those economically disadvantaged youths and adults who are outside the school system. The latter legislation follows a series of federal manpower training and employment programs that were initiated prior to WWII to contend with the plight of the unemployed, displaced workers, and the economically disadvantaged. The Job Training Partnership Act (JTPA) of 1982 (PL 97-300) signaled a new approach to job training. It placed *emphasis on outcomes* rather than prescriptive measures for determining program effectiveness. These outcomes apply to adults who engage in JTPA-funded training:

- Placement in *unsubsidized employment* for which training was received
- *Retention in unsubsidized employment*
- *Increase in trainee earnings*
- *Reduction in the number of individuals and families on welfare.*

These additional outcomes are specified for youths:

- Attainment of *recognized employment competencies*
- *Completion of* elementary, secondary, or post-secondary *schooling*
- *Enrollment in other training*, apprenticeship, *or armed forces.*

Local private industry councils (PICs) are charged with specifying the objectives to achieve these mandated outcomes, but few prescriptive directions are given about what programs to offer or how, when or where to offer them.

The important feature in JTPA is that it provides training targeted for economically disadvantaged youths and adults through programs and services provided by a variety of program providers, public secondary schools, Regional Occupational Programs/Centers (ROP/Cs), community colleges, community-based organizations (CBOs), and private postsecondary schools. It also is provided through on-the-job training. All such program providers are held to the same criteria for gauging program effectiveness; when a performance contract is used with a training agency, payments depend upon attainment of specified objectives.

The new vocational education and JTPA legislation gives strong emphasis to outcomes, especially the use of placements in related employment as a means of assessing program success. With the advent of JTPA as a mechanism for introducing a competitive touch among program providers, the feasibility of using the placement rate concept as a means of comparing and assessing programs has been posed by those who plan, fund, and operate programs or by those who set policy for such programs. The use of a simple quantitative indicator to measure effectiveness does not take into account the different intentions of the two pieces of legislation and the lack of clarity between the objectives of vocational education and job training.

The Department of Labor and JTPA programs share the primary mission of minimizing the unemployment rate in general and reducing the unemployment of specifically targeted populations. The mission of vocational education—an integral part of public education—is to prepare people for work, but it is not a corollary axiom that its primary mission is to reduce unemployment.

CONCLUSION ONE: The Perkins Act and JTPA share many common objectives related to training, retraining, and upgrading workers. The Perkins Act includes employed workers as well as the unemployed, while JTPA places emphasis on the unemployed and economically disadvantaged. Both give strong emphasis to program outcomes.

1

Definitions of Job Training and Vocational Education

Just as the line between general and vocational education is not always clear, the distinction between vocational education and job training is not always clear. But for purposes of planning and measuring program outcomes, it is understood that vocational education is the broader of the two and that job training may be an integral part of vocational education. The definitions developed by the California Community Colleges for policy-making by the Board of Governors serve the purpose of noting the differences for this study.

- **Job Training** (also called employment training) refers to a planned systematic sequence of instruction or other learning experiences designed to impart skill, knowledge, or attitudes to prepare individuals for immediate employment. Such training is usually intensive, job specific, and of short duration.
- **Vocational Education** (also called occupational education) refers to an organized sequence of instruction or other learning experiences designed to provide individuals with necessary skills, knowledge, and attitudes to attain entry-level employment, occupational advancement, upgrading, or career change. Such occupational preparation may be accompanied by broader educational experiences to assist persons to achieve longer-range career aspirations as well as immediate occupational objectives and is usually of longer duration than short-term job training.

The differences as well as the relationship between vocational education and job training must be recognized in considering the use of the placement rate concept. In vocational education, strong emphasis is placed upon student development, whereas in job training the emphasis is often shifted to the needs of employers. Both of these are legitimate goals which can be mutually supportive; in neither case are the needs of students ignored. As training becomes more job and employer specific, emphasis changes from educational goals to economic impacts for the individual and employer. Generally, private industrial firms are not in a position to provide or be involved extensively in the educational development of the individuals who are hired. Their principal concern is to match the supply of trained workers to their own employment demands and to reduce the learning curve of such workers so that they become productive employees.

A lack of understanding about the subtle but real shift in emphasis of program goals between vocational education and job training contributes to unrealistic expectations and some of the criticism leveled at public secondary and postsecondary institutions. (Grasso & Shea)

2 CONCLUSION TWO: Federal vocational education legislation has objectives for training and upgrading employed persons, but little attention is given to this function by the VEDS data collection system for determining student impacts or program outcomes.

3 CONCLUSION THREE: During the past five decades, enormous technological breakthroughs, social changes, and political changes have altered the structure of industries, created and eliminated whole occupational fields, and revised the competencies required to enter, hold, and advance in employment. These changes have set the stage for people to change careers several times during their working lives.

The Changing Nature of Work

Although there is continuity between the first and latest federal legislation, the nature of work has been dramatically altered by world events, technology, and economic, social, and political changes. Just as the industrial revolution changed institutions and the way of life for workers, the changes that have occurred during the past fifty years have also altered the world in which people work. (Toffler) A few examples illustrate the latter point.

- Although Einstein had postulated his General Theory of Relativity in 1915, the prospect of using atomic energy remained incomprehensible.
- The true dimensions of the Milky Way had not been discovered (1918) and landing a human being on the moon was beyond belief (1969).
- The first airmail flight from New York to San Francisco (1920) had not yet occurred and supersonic commercial flights (1969) were not on the charts.
- The process of continuous casting of nonferrous metal had not been perfected (1927), much less the concept of making silicon microprocessor chips (Intel, 1971) or of using microelectronic intelligence (robotics) in manufacturing.
- Home radios were rudimentary and electronic television had not been invented (1933), nor was there an industry related to commercial television (1950s), leading to the vast telecommunications industry (1980s).
- The great economic depression of the 1930s had not yet paved the way for the federal government to buoy up the sagging economy with public works programs (1933) or social security legislation (1935) or state involvement with unemployment insurance (1932) or the Individual Retirement Plans (IRAs) (1970s).
- The Queen Mary had not yet made a record crossing of the Atlantic in 3 days, 23 hours, 57 minutes (1936), much less become a stationary tourist attraction in Long Beach harbor (1970s).
- Labor unions had long existed, but no law yet compelled collective bargaining (1935), nor were there defined unfair labor practices for labor unions (1947) or collective bargaining of professionals (1960s).
- Civil rights and sex discrimination had not yet made the national political agenda for federal legislation (1963-64).

These seemingly unrelated events altered the structure of industries, created employment for some and eliminated work for others, changed the occupational competencies required for entering and staying in the labor market. The economy shifted from agriculture, to industry, to a postindustrial age in which services and information processing became major occupational fields. They reflected the impact of technology and the need to plan vocational programs to meet the needs of the future as well as the present. They set the stage in which people must be prepared to change jobs, if not occupations, several times during their working lives.

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STUDY PROCEDURES AND ACTIVITIES

The study was conducted during a five-month period between May and September 1984. The study team was responsible to a four-person placement rate concept steering committee comprised of representatives from COICC, SDE, EDD, and COCCC. The state project monitor was from the COCCC. Members of the committee are presented on the title page of this report.

The project team operated in concert with a statewide advisory committee who met four times during the project. Membership of this advisory group was comprised of persons representing the California Advisory Council on Vocational Education (CACVE), adult vocational education programs, regional occupational programs/centers (ROP/Cs), and secondary education, community colleges and EDD. In addition, ex-officio members represented administrators from SDE, COCCC, and the State Job Training Partnership Office (JTPO). Names of the advisory committee members and their affiliations appear on the page following the title page.

The steering committee and the advisory committee served throughout the project to provide resources on existing uses of placement information and to act as a sounding board for findings and conclusions of the study team. They reviewed the major conclusions and recommendations contained in this report and reached consensus on most issues and recommendations.

The time frame for project activities included the summer months in which many educators and state agency personnel took vacations. This made personal contact difficult; thus, data collection activites were designed to obtain as much information as possible from those who were available for personal interviews and other data collection efforts rather than to conform to statistical sampling techniques. The collection procedures worked very well for a study of this nature because input was needed from decision-makers for vocational and job training programs.

The major study procedures included the following:

- Approximately 250 written documents, reports, manuals, and research abstracts dealing with placement, student follow-up systems, program planning and quality, labor market information, and other related topics were reviewed. Over 100 of these items were found to be pertinent to this project and were used in the development of ideas, concepts, and findings by the study team. The bibliography (Appendix A) lists those found germane to the objectives of this study, many of which are used as references in this report

- To obtain an overview of trends and uses of the placement rate concept in other states, the study team contacted state officials in seven states suggested by research personnel at the National Center for Research in Vocational Education. Findings from these seven states and others are summarized in Appendix B

- A review was made of existing Vocational Education Data System (VEDS) forms used by local educational agencies to report enrollment and placement data to meet federal requirements. In addition, various follow-up instruments used by local program providers were collected and analyzed to identify postprogram placement options and the definitions used for each option

- Based on a synthesis of placement options and accompanying definitions, a data collection instrument was developed for distribution to vocational and employment training agency administrators. This form contained three sections: 1) *description of respondents* so that response patterns could be analyzed; 2) *reactions to seven identified placement options and accompanying definitions*; and 3) *description of student follow-up and placement rate information practices*.

  The survey form was tested with the advisory committee and revised before it was used in the field.

  A fourth section to this form was added for use with state-level subject area consultants and program managers in the SDE and COCCC to determine their opinions on the applicability of placement concepts and definitions to various vocational subjects and types of programs. A facsimile of the final version of the survey form appears in Appendix C.

  This survey was distributed to a cross-section of administrators and vocational educators from ROP/Cs, adult schools, and community colleges at professional meetings held during the summer months. No such group meetings of secondary school administrators were conducted during this time, so segments of the survey form were used as the basis for a telephone survey of secondary school administrators of vocational programs in September 1984. Results of the written and telephone survey are reported later; however, a list of the agencies that responded to the written survey and the secondary schools that answered questions by telephone appears in Appendix D. Some survey respondents and telephone contacts were responsible for more than one school or college; in other cases, a respondent was responsible for more than one type or level of program, e.g., secondary, adult education, and ROP/C programs. In total, information was obtained about 120 public secondary, adult, and community college vocational program providers. These represent a diverse geographic cross-section of the

state and a wide variety of sizes of programs, ranging from large (Los Angeles City Schools) to small rural districts (Ceres Unified School District and West Hills College).

In summary, information was obtained from:

- 28 secondary school districts, including 3 agriculture programs
- 8 adult education school vocation programs
- 25 ROP/Cs
- 59 community colleges
- 5 local Private Industry Councils (PICs)/Business Labor Councils (BLCs).

- As part of the administration of the written survey and collection of information and ideas from the field, meetings were conducted with eight professional groups in the state:
  - Subject area consultants/specialists, COCCC
  - Vocational education program managers, SDE
  - Northeastern California Higher Education Council
  - Bay Area Community College Occupational Planning Committee
  - Southern California Area Deans
  - San Diego Area Occupational Deans
  - California Association of Regional Occupational Programs/Centers
  - Adult Education Directors, Association of California School Administrators.

- In addition to meeting with professional groups, the study team made on-site visits to 16 programs and agencies in California. These included 3 adult education schools, 6 ROP/Cs, 5 community colleges, and 2 PICs/BLSs—the Los Angeles Business Labor Council and the Western Job Training Partnership Association, Hayward. The latter organization serves as the PIC for Alameda County and the professional association for over 40 other PICs in California and other western states. A list of all on-site locations appears in Appendix E.

- During the project, a total of 149 personal interviews or telephone contacts were made by the study team with representatives of 15 different types of state and local agencies involved with vocational education, job training services, correctional institutions for youths and adults, JTPA-sponsored programs, legislative staff, research projects, and other groups concerned about placement outcomes and student impacts. The list of all persons interviewed by the study team during the project appears in Appendix F.

These project activities contributed to the conclusions and recommendations which are described in the following sections of the Technical Report.

2. Determining Feasibility

FEA-SI-BLE: Capable of being done, effected, or accomplished, suitable, probable, workable, practicable. . . .

— Random House Dictionary of the English Language, Unabridged Edition

CRITERIA USED TO DETERMINE FEASIBILITY

Considering the complex issues involved with the placement rate concept, the feasibility study had to consider the attitudes of program providers as well as the factual information that was free of emotional content. The framework for dealing with such diverse information included four basic criteria for collecting and analyzing information and making independent judgments about the feasibility of using placement rates as a means of comparing programs.

- **Technical Factors.** Are data collection systems in place and technically capable of rendering sufficient and reliable information about placement rates in different vocational and job training programs so that comparisons could be made?

- **Definitional Factors.** What definitional problems exist in the current data systems that make it possible or unlikely that the placement rate concept could be implemented? Are common postprogram outcomes used by all program providers so that comparisons are valid and useful?

- **Operational Factors.** What impact do institutional missions, sources of funding, or public expectations have on use of the placement rate concept among program providers? Do different target populations for various programs have any impact when making comparisons? What is the effect of different program objectives, modes of delivery, levels of training? Do different methods of obtaining data affect *reported* student placements?

- **Philosophical and Political Factors.** What purposes are served for state and local program providers by making placement rate comparisons? What issues are at stake (i.e., fairness, resources, student interest, employer needs) by applying the concept to vocational and job training programs?

Other factors might be applied to the analysis of the placement rate concept, but the ones noted here proved to be sufficient to reach conclusions and make appropriate recommendations.

STEPS IN DETERMINING FEASIBILITY

After identifying the criteria for analysis, the following steps were taken to determine the feasibility of using the placement rate concept to compare or assess vocational and job training programs.

1. State agencies and programs to be included in the study were identified.
2. Program outcomes and related definitions used by various program providers were compared and synthesized.
3. Follow-up systems used by the appropriate state and local agencies for gathering, compiling, and using data for program planning and assessment were reviewed.
4. Reactions and suggestions from program providers regarding the placement rate concept, suitable definitions, and alternatives for planning and assessing vocational and job training programs were obtained.

Before presenting a summary of the study findings, each of the four steps is explained below.

Identification of Programs To Be Studied

One study conducted by the Assembly Office of Research stated that some 19 different agencies were engaged in providing innumerable employment preparation programs in California. By design, our study centered upon the state agencies represented by the COICC which included vocational and training programs under the auspices of the State Department of Education (SDE) including private postsecondary schools, the Chancellor's Office, California Community Colleges (COCCC), and the Department of Rehabilitation. In addition, training programs offered through JTPA were included in the project.

Training provided by the military services was not included in the scope of this study because the primary concern about application of the placement rate concept was the civilian labor force. Also considered were training programs offered by the Department of Corrections and the California Youth Authority (CYA). After making contact with these agencies to determine the procedures used to follow up trainees, it was decided, because of limited time and project resources, to concentrate on vocational programs in which clientele enter and leave on a voluntary basis.

In the final analysis, seven program delivery systems were included.

1. Regional Occupational Programs/Centers (ROP/Cs)
2. Secondary Vocational Programs (High Schools)
3. Community Colleges
4. Adult Vocational Education (VE)
5. JTPA-Funded Programs
6. Department of Rehabilitation
7. Private Postsecondary Schools (PPS).

Four of these delivery systems report student or program data to the SDE: ROP/Cs, high schools, adult VE, and PPS. The others have separate reporting systems.

Comparison and Synthesis of Concepts and Related Definitions

Existing data reporting systems and accompanying definitions used by these seven agencies were analyzed to identify common program outcomes. This was augmented by collection and analysis of follow-up instruments and procedures used by local program providers that were surveyed or visited by the study team.

Although definitions varied when synthesized, the seven commonly used placement options were: 1) Related Employment; 2) Unrelated Employment; 3) Related Education or Advanced Training; 4) Unrelated Education or Advance Training; 5) Military Service; 6) Not Seeking Work or Not in the Labor Force; and 7) Unemployed and Seeking Employment.

Use of Student Follow-up to Determine Placement Rates

Program providers were surveyed to determine the procedures used to obtain information about program outcomes and impacts through follow-up of former students. Forms used for student follow-up were obtained and analyzed for content. Further inquiry was made about the procedures used for student follow-up and how such information was used for planning and program evaluation.

Reactions and Suggestions Related to the Use of the Placement Rate Concept

The issues related to the placement rate concept contain conflicting opinions among program planners, labor market analysts, public and private program providers, and funding agencies. The study team provided ample opportunity for persons contacted to express their ideas about the issues. Most vocational educators agreed that placement in related fields for which training was provided was an important program outcome. There were few who did not agree. There also was consensus among vocational educators that related job placement was not the only positive outcome for many vocational programs and that funding agencies need to recognize the legitimacy of these positive outcomes.

Some educators addressed the philosophical issue of applying such criteria to vocational programs and not having a corresponding requirement for academic subjects to account for student impacts in relation to further education or transfer to higher educational institutions. *However, the strongest level of concern was about the practical problem of finding sufficient time and resources to provide necessary placement assistance and conduct appropriate follow-up studies to obtain valid and reliable information.*

The findings and conclusions related to these steps in determining feasibility are presented in Section 3.

EXPLANATION OF THE PLACEMENT RATE CONCEPT AND ITS LIMITATIONS

The process of determining feasibility of the placement rate concept must begin with an explanation of the concept itself. One needs to know what it means before application of the criteria noted above can be useful. The placement rate concept was defined earlier. This definition was used as a reference point in obtaining ideas and reactions from those interviewed as well as analysis of related data from each program provider.

I don't think any of us can do a good follow-up until we can put more dollars into the effort . . .

ROP Superintendent
Southern California

Reactions and concerns about limitations of the placement rate concept as currently defined fell into four categories which are summarized in Figure 1. These areas of concern were:

a. Which students or trainees are to be included in the *number of students* which is part of the formula for determining placement rates?

b. Which students or trainees are to be included among those *who find work?*

c. How is the *number of students available for work* to be computed?

d. What program outcomes are to be included in the *job placement rate?*

Figure 1, appearing in the Executive Summary Report, contains the major questions posed by those who were contacted during the study. The remainder of the report answers some of these questions that are perceived as limitations to use of the placement rate concept as currently defined.

CONCLUSION FOUR: The current definition of the placement rate concept is too narrow and limited for determining the positive outcomes for students or trainees of vocational education or job training programs.

3. Findings and Conclusions

This section contains a summary of the key findings related to the four criteria established to determine the feasibility of the placement rate concept.

TECHNICAL FEASIBILITY OF USING THE PLACEMENT RATE CONCEPT

The feasibility of using the placement rate concept to compare and evaluate vocational programs differs when considered for state and local levels. Technical feasibility at the state level depends upon the comprehensiveness, accuracy, and completeness of appropriate information that is comparable from all major program providers. Technical issues at the local level are narrowed to labor market information for the service area of the program provider and tracking program outcomes and placement success of trainees.

Technical Feasibility at the State Level

State-level data collection systems for each of the seven major program providers or funding agencies were identified and examined. The systems used by the SDE and COCCC are designed primarily to meet federal compliance requirements for the Vocational Education Data System (VEDS). The means of obtaining information about post-program placement outcomes is based on various student follow-up systems which are described below.

1. ROP/Cs currently have a separate data collection system administered at the local level and submitted to the SDE which produces state summaries. ROP/Cs do not receive federal vocational education funds directly, but their system provides information compatible with VEDS. The ROP/Cs collect information from all students, both completers and leavers, who enroll in their programs for purposes of gaining entry-level employment. This group, comprised largely of secondary school students and some adults, is called *preparatory students*. Another group of students is comprised mostly of adults who take training to strengthen job skills or enter a new line of work. These *supplementary students* are not included in the current follow-up system. The ROP/Cs collect follow-up information from students using written instructions provided for them (Regional Occupational Centers/Programs). The SDE compiles the data for all 67 ROP/Cs in the state. Approximately 184,000 students were followed up by this system in 1981-82.

2. Placement information for secondary school vocational programs is collected from about 390 secondary school districts through a system called Follow-up of Students and Employers (FUSE). Data are collected annually from a 25-percent sample of the districts. This system is designed to meet VEDS requirements. Local districts identify the students to be included in the follow-up survey using guidelines prescribed by the SDE (FUSE Operations Handbook). Sample students are generally 11th and 12th graders who complete or leave occupational preparation programs. Adults enrolled in programs receiving federal vocational education funds are included in FUSE under the category of postsecondary students. Some 37,000 secondary and 1,100 adult program completers were followed up by sample districts in 1981-82.

   Note: In addition to the formal FUSE reporting system for secondary vocational programs, program information and enrollments in vocational agriculture are collected from agriculture instructors. Collection of such information is planned for the 400 vocational agriculture sites in the state in order to determine the extent to which standards of SB-187 are being met. This legislation provided $3 million incentive money for program improvement in 1982-83 and 1983-84. One of the program standards calls for a 70-percent placement rate of all program completers. Acceptable placements are considered related employment and further related training and education. (SB-187 Committee). At the time of this study, no placement data had been collected.

3. Community colleges gather placement information in compliance with VEDS requirements and submit it to the COCCC, which summarizes the data. Data are collected annually in a 25-percent sample of the programs in California's 106 community colleges. Community colleges follow up program completers locally using guidelines in the Student Accountability Model. (SAM Operations Manual) In 1981-82, about 30,000 program completers were included in the follow-up sample. Program leavers were not followed because such data were not required by VEDS in 1981-82.

4. Adult school employment preparation programs that do not receive federal vocational education funds are not required to report post-program placement rates of those who took such training. Local adult schools often follow up former students to learn about placement outcomes for their own information and purposes, but do not report the findings to the state. An estimated 170 adult schools offer vocational or job training programs in the state, and about 25 percent of the total average daily attendance (ADA) in adult education is generated in vocational education programs.

5. JTPA does not offer programs; it funds them through local program and service providers located within the

service delivery areas of 50 local private industry councils (PICs). JTPA programs and services are provided by secondary schools, ROP/Cs, community colleges, community-based organizations (CBOs), and private postsecondary schools on a competitive basis in which prescribed performance standards must be met. (These legally mandated outcomes were listed earlier in the report.) Each PIC collects information about related job placements and other program outcomes from each program provider. However, such data are not conveyed by type of program or program provider in quarterly activity reports to the State Job Training Partnership Office (JTPO). There is no mandate to report information in such detail in either state or federal legislation. Local PICs are the controlling agency for determining effectiveness of programs and services under their jurisdiction.

6. The Department of Rehabilitation acts as a referral agency for its clients to various job training providers. Such referrals may include public school vocational programs, CBOs, community colleges, ROP/Cs, and private postsecondary schools. Follow-up of clientele is done by rehabilitation counselors to determine the status of persons who received assistance from the agency, but such information is not compiled annually in a way that provides comparisons of job placements by type of training taken by clients.

7. Private postsecondary schools are not required to submit placement information by type of program to the SDE. Private schools are obliged to provide information on placements and related services to prospective clients. Many of these schools are reported to be reluctant to provide aggregated placement data to the state because such information is considered proprietary.

Data Elements Necessary for State-Level Placement Comparisons

To be technically feasible, state data collection systems must obtain or statistically determine information on seven common data elements to compare vocational programs within or among program providers. These are: 1) the number of persons who complete the same program (or other unit of analysis such as total completers and leavers); 2) the number of students in the follow-up sample (using statistically comparable sampling techniques); 3) the number/percent of follow-up responses; 4) the number/percent of students whose status is unknown; 5) the number/percent of students who are not available for work (because of other factors such as continued schooling, military service, illness or incarceration); 6) the number/percent of those who are available for work; and 7) the postprogram outcomes. The latter must be comparable and include all appropriate options to determine accurately the impacts of the training programs on the students who take them.

Findings: State-Level Use of the Placement Rate Concept

The foregoing seven common data elements were used to assess the technical feasibility of using placement rates for comparison of existing vocational programs. The results are shown in Figure 2 (Executive Summary Report), which indicates that these common elements either are not used or are not comparable across agencies. (Actual data from state records for the 1981-82 program year were used for the computations summarized in Figure 2. Some changes in the requirement to collect information from both completers and leavers were instituted after this date.)

- Three of the seven major program providers are not required to provide placement rate information (Adult Vocational Education, Vocational Rehabilitation, and Private Postsecondary Schools).

  The samples and sampling techniques used by each agency differ so that comparisons across agencies are not valid.

- JTPO does not collect state-level data that indicate job placements by type of program or training provider.

- Placement data for high schools and community colleges are collected on a sample basis, but the percent of the sample whose *status is unknown* is so large that placement outcomes shown for those *available for work* are too small to be useful for state or local planning. (Placement outcomes for those who are available for work was known for only about six to seven percent of the student populations served by high schools or community colleges in 1981-82.)

- Four different state agencies are involved with collection of information about the outcomes of programs or services for which they are responsible, but no state-level mechanism exists for compiling, analyzing, or disseminating statewide placement data from the agencies shown in Figure 2.

CONCLUSION FIVE: Use of the placement rate concept for making comparisons among different program providers is not technically feasible at this time because inconsistencies occur in the current state collection systems and there is a lack of commonly used data elements.

Feasibility of Use of the Placement Rate Concept at Local Level

Feasibility of using the placement rate concept by local-level program providers was examined through written survey responses, personal interviews, and on-site visits. The results of this investigation revealed that the use of placement rate information is currently encumbered by a number of factors, among which were:

- Difficulty in determining whom to follow up in some secondary and community college vocational programs
- Difficulty or inconsistency in defining program completers or leavers
- Low response levels to many follow-up studies which limited the value of the information in determining actual student outcomes
- Lack of appropriate postprogram placement options in many follow-up systems which deprived planners from knowing what impact programs had on persons who were employed at the time they enrolled in vocational programs
- Low priority among some local program providers to conduct adequate student follow-up efforts to determine program impacts
- Lack of financial and human resources in some programs with which to conduct adequate student follow-up activities.

Despite these and other factors that limit current use of placement rates for local program planning and assessment, a conclusion appears warranted. See conclusion six.

Because the task is difficult is no reason to abandon the effort to clarify and refine the system for determining job placements.

PIC Director
Northern California

CONCLUSION SIX: The use of placement rates for local program planning is more appropriate than at the state level, but they should be used in conjunction with other sources of information about the demand for vocational programs in the local or major labor markets served by the program provider. This information might include regional labor market information generated by EDD, Bureau of Labor Statistics information, and employer sources.

Even with the difficulties noted above, the technical feasibility of using the placement rate concept at the local level is more realistic than for the state. Use at the local level will require that a uniform set of placement outcomes be utilized, that standardized definitions for each program outcome be accepted, and that common definitions for other terms necessary to determine follow-up results be developed. Local use of the placement rate concept by an individual program provider will not be effective without close cooperation with other program providers and a shared data base on labor market requirements that is timely and accurate.

Utilization of consistent definitions and procedures for following up former students is essential to making the placement rate concept a feasible undertaking even at the local program level.

DEFINITIONS AS A BARRIER TO FEASIBILITY OF THE PLACEMENT RATE CONCEPT

In addition to the technical barriers noted above, the need for uniform placement options was revealed during the study. Seven placement concepts or options were found to be common in the data collection systems that met VEDS requirements. The study team then determined whether the existing options should apply to all program providers and vocational programs. The next step was to identify any missing placement options that would be useful.

(Placement) definitions should be the same for all delivery systems. . . .

ROP/C Director
Central California

Using the seven placement options found to be common to most programs, vocational educators from secondary programs, ROP/Cs, adult vocational education, and community colleges were surveyed to determine the extent to which they believed each option could apply to their own agency programs. They were also asked their opinion about the applicability of the placement options in general to vocational education, job training, and JTPA-funded programs. In JTPA programs, outcomes are specified by legislation and by local PICs; however, when semantic differences are screened and economic impacts related to client removal from public assistance are dropped, many of the JTPA placement options for adults and youths are similar to those for vocational education.

Table 1 shows the number and percent of responses to each placement option from each agency. The survey response from adult educators is small and the sample from other agencies was primarily administrators, so the findings must be viewed accordingly, but the pattern of responses is surprisingly positive and uniform. Study team observations and comments about each placement option are summarized on the accompanying chart. With the exception of adult educators, other agencies that did not have a state data reporting system for placements were not included in the written survey. Contacts with such agencies did include information about their attitude toward various placement options.

6

TABLE 1

SUMMARY OF SURVEY RESPONDENTS WHO AGREED WITH APPLYING PLACEMENT OPTIONS TO PROGRAMS OFFERED BY THEIR OWN AGENCY AND JTPA FUNDED PROGRAMS

PLACEMENT CONCEPTS	Percent of Respondents to Each Concept Who Agree With Use of Concept by Their Own Agency, in VE, JT, and JTPA Funded Programs						
	Secondary Programs[1]	ROP/Cs	Adult VE	Community Colleges	VE Programs	Job Training	JTPA Funded[2]
1. RELATED EMPLOYMENT							
Number of Respondents	24	23	8	49	109	97	89
Percent Who Agree	96%	96%	75%	86%	95%	96%	80%
2. UNRELATED EMPLOYMENT							
Number of Respondents	24	24	8	47	108	94	88
Percent Who Agree	79%	92%	75%	85%	88%	82%	69%
3. RELATED EDUCATION/ ADVANCED TRAINING							
Number of Respondents	23	26	8	49	109	100	89
Percent Who Agree	100%	100%	75%	88%	99%	85%	57%
4. UNRELATED EDUCATION/ ADVANCED TRAINING							
Number of Respondents	23	25	8	44	103	92	83
Percent Who Agree	65%	100%	75%	77%	81%	66%	53%
5. MILITARY SERVICE							
Number of Respondents	23	25	7	50	108	97	90
Percent Who Agree	91%	100%	57%	76%	88%	85%	58%
6. NOT IN LABOR FORCE/ NOT SEEKING WORK							
Number of Respondents	23	26	8	49	109	97	91
Percent Who Agree	61%	100%	63%	78%	83%	81%	67%
7. UNEMPLOYED/SEEKING WORK							
Number of Respondents	23	23	7	47	103	93	85
Percent Who Agree	74%	100%	86%	89%	92%	92%	76%

[1]Secondary respondents were surveyed by telephone in September 1984.

[2]Secondary telephone survey did not include data on this item. Total possible to this item was 94.

Source: Compiled by Carvell Education Management Planning, Inc., Los Altos, CA.

CHART 1

SUMMARY OF SURVEY RESPONSES ABOUT ACCEPTANCE OF POSTPROGRAM PLACEMENT OPTIONS

PLACEMENT OPTIONS	OBSERVATIONS AND COMMENTS
1. RELATED EMPLOYMENT	96% of secondary respondents said this option was applicable to high school vocational programs. The same percent of ROP/C respondents said this was applicable to their agency. Other groups indicated this option was also applicable for their individual agencies.
2. UNRELATED EMPLOYMENT	Agreement was high that this option should apply to their respective agencies among ROP/Cs (92%) and community colleges (85%); there was only moderate agreement from all respondents that this option should apply to JTPA-funded/ contracted programs (69%).
3. RELATED EDUCATION/ ADVANCED TRAINING	Agreement was very high among respondents to this option to VE (99%) and high that it should apply to JT (85%). There was very low response indicating that it should apply to JTPA-funded/contracted programs (57%).
4. UNRELATED EDUCATION/ ADVANCED TRAINING	Agreement was high among ROP/C respondents that this option should apply to their agencies (100%) and application of this option was agreed to by about 65% of the respondents from secondary schools. Only 53% of all respondents indicated this was applicable to JTPA-funded programs.
5. MILITARY SERVICE	ROP/Cs and secondary deliverers of vocational education indicated agreement most often; however, a lower portion of Adult VE agreed with this (57%) for their programs and 58% of all respondents said this option should apply to JTPA-funded programs.
6. NOT IN LABOR FORCE/ NOT SEEKING WORK	ROP/Cs agreed this option should apply to them; secondary schools had fewer who agreed.
7. UNEMPLOYED/SEEKING EMPLOYMENT	Agreement was very high that this should apply to VE (92%) and JT (92%) and to programs offered by all providers, including JTPA programs.

All seven concepts received high agreement (80% or more) when related to vocational education and, except for unrelated education/advanced training, to job training, in general; but only related employment and unemployed/seeking work received more than a 75% response rate for JTPA.

NOTE: Percents for each program provider were derived by tabulating responses from persons who were affiliated with that agency or who have responsibility for working with vocational programs offered by such agencies.

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Findings: Acceptance of Postprogram Placement Options

- There was general acceptance of the seven postprogram placement options by each of the program providers that were surveyed.

- The state program managers and subject area specialists and local program personnel did not believe the seven postprogram placement options would be prejudicial to any occupational program area or level of program. There was belief that the importance of some placement options would vary depending upon the level and type of vocational or job training program.

CONCLUSION SEVEN: The seven placement options that met VEDS requirements do not provide an appropriate option for determining impacts and program outcomes for students who were employed at the time they enrolled in their programs. There is a need for an eighth postprogram option to cover students taking vocational and job training programs for career improvement.

7

Guidelines for Working Definitions for Placement Options

There was reasonable agreement among those surveyed that the eight placement options derived during the study were useful for program planning and assessment. It was more difficult to obtain consensus on the definitions related to each of the placement options. Many program providers operated on the premise that each placement option was self-explanatory. In reality, this was not the case when they were asked to agree on common definitions for the placement options.

There was agreement among those surveyed that the more general the definition for each placement option, the more workable and acceptable it would be for collecting and synthesizing student follow-up information. In most follow-up systems, survey respondents self-select the placement option that they believe appropriate. Research indicates that student responses to their postprogram placement status are as reliable, faster, and less costly than using professionals to classify student descriptions of their status. (Rossman)

The level of agreement on various definitions for the seven placement options known at the time of the written survey are summarized in Appendix G. The eighth option, career improvement, was not identified until survey responses and field visit data were analyzed by the study team. When information related to definitions for the placement options was assembled, it was presented to the project advisory committee. The working definitions for the eight placement options proposed by the advisory committee are presented on the accompanying Chart 2.

Other Needed Definitions

In addition to a uniform set of definitions for appropriate placement options, the study revealed a need for standard definitions for three other elements related to the placement rate concept.

No single set of definitions for *programs, completers, or leavers* was found to be acceptable to the program providers that were contacted or responded to surveys as part of this study.

- VEDS defined a program as a planned sequence of courses or learning experiences that lead to a set of occupational objectives. . . .

The variation of objectives, content, structure, level, and duration of vocational and job training programs differed widely. In some cases, a single course may constitute a program for certain entry-level occupations; others require as much as 1,600 hours or two years to complete. In JTPA, the emphasis appeared to be placed on short-term training lasting six months or less.

Furthermore, the coding system used to identify vocational programs varied among program providers. ROP/Cs and secondary schools used USOE codes which have now been converted to Classification of Instructional Programs (CIP) at the federal level. Community colleges used a Taxonomy of Programs (TOPs) to classify programs. There is no taxonomy for classifying JTPA programs, although they do attempt to relate training to Dictionary of Occupation Titles (DOT) in order to determine related placements. But this practice varied among the five local PICs contacted during this study.

Attention must be given to individuals who are interested in attaining advanced or new job skills in a short time. Program completion is not an essential criterion for these students.

President, Community College
Central California

Differences in the program coding systems can be addressed through the use of an educational and occupational code crosswalk (NOICC). This process would have to be carried out by some state-level entity to compare program outcomes, presuming that common definitions for placement options, programs, completers, and leavers could be adopted and utilized.

Definitions of completer varied for VEDS, ROP/Cs, community colleges, and JTPA programs. Some definitions were linked to specific program codes, while others related to student objectives. The problems of defining program leavers were related to those of defining completers. This has been a source of criticism of vocational education in some

CHART 2

PROPOSED WORKING DEFINITIONS FOR EIGHT PLACEMENT OPTIONS

PLACEMENT OPTION	WORKING DEFINITION
1. RELATED EMPLOYMENT	Former student is employed full- or part-time in a job in which the job skills used are related to those learned in the vocational program or course that was taken.
2. UNRELATED EMPLOYMENT	Former student is employed full- or part-time in a job in which job skills used are not related to those learned in the vocational program or course that was taken.
3. RELATED ADVANCED EDUCATION OR TRAINING	Former student is enrolled in another training program or educational institution in a course or program with objectives related to the attainment of higher skills and knowledge in the same or similar area as those in the previously taken vocational program.
4. UNRELATED ADVANCED EDUCATION OR TRAINING	Former student is enrolled in another training program or educational institution in a course or program with objectives not related to the attainment of higher skills or knowledge in the same or similar area as those in the previously taken vocational program.
5. MILITARY SERVICE	Former student is serving full-time in a branch of the armed forces.
6. NOT SEEKING WORK/ NOT IN LABOR FORCE	Former student is not pursuing further education or training and is not seeking employment.
7. UNEMPLOYED/SEEKING WORK	Former student is not pursuing further education or training and is actively seeking employment.
8. CAREER IMPROVERS	Former student was employed at time of taking a vocational course or program and achieved a career-related goal as a result of program participation.

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public schools and community colleges. (Wilms) Other extensive studies of student participation in vocational education, especially in community colleges, point to the fact that, with a few program exceptions, students do not identify with or care about institutionally defined programs; they take courses to reach their career objectives. (Sheldon)

Guidelines for Defining Program, Completer, and Leaver

Despite the difficulties noted above, the consensus of the project advisory committee was that guidelines for defining each of these terms would be useful to local and state planners. The following were agreed upon as guidelines.

- PROGRAM: An organized series of learning experiences offered by an authorized agency to achieve designed occupational objectives.
- COMPLETER: A person certified by an authorized program provider as having progressed sufficiently in a defined vocational or job training program to have acquired marketable job competencies to gain, hold, or advance in employment.

  Note: The term *certified* in this suggested definition refers to a systematic process used by the program provider to assess and document the achievement level and/or the acquisition of job competencies that are part of the designed occupational objectives of the program.
- LEAVER: A person who left training prior to certification in a defined vocational or job training program offered by authorized agency.

  Note: A student may voluntarily leave a program before formally completing it and still have attained enough job competencies to enter or hold employment, but unless this person is certified by the program provider, he or she would be classified as a leaver.

These definitions are suggested as guidelines for local and state consideration and further study. They are student-centered and do not necesssarily match traditional definitions designed for institutionally structured and time-oriented instructional programs. Another consideration in the use of these guidelines is that there are varying levels of achievement among program leavers. Some gain no skills before they leave Others partially achieve marketable competencies during the time they spend in training, but not to the same extent that they might had they finished the program entirely.

The definition of a program leaver must be broad because some students learn entry-level skills in less than one semester.

District Director, Vocational Education
and Employment Training Services
Community College, Southern California

Three implications of these definitional guidelines are that 1) they conform best to competency-based instructional programs; 2) they place responsibility upon program providers to carefully design and state program objectives; and 3) they demand that program providers establish and follow formal methods for documenting the student's acquisition of job competencies for gaining, holding, or advancing in employment.

CONCLUSION EIGHT: In order to be feasible for state or local levels, standardized definitions for each postprogram placement option, program, completer, and leaver must be agreed upon and adopted to carry out student follow-up studies, data reporting, and analysis of program outcomes.

OPERATIONAL FEASIBILITY

Operational characteristics of program providers within the same delivery system may vary because of differences in location, size, and local labor market conditions. Thus, vocational programs in a small rural high school might differ operationally from those in a large urban school.

Because of this, the study concentrated on those operational factors that were deemed to be characteristic of different program providers rather than on the operational differences that might occur among high schools in different localities or adult schools or community colleges located in different parts of the state.

Operational differences that affect the use of the placement rate concept among different types of program providers were found to fall into five categories:

- The *mission or charter of the agencies* involved with providing vocational and job training programs and the impact of this mission on the designed objectives of the vocational programs that are offered
- The *characteristics of the target populations* served by each major program provider
- The *mode of recruiting, screening, and accepting students* for vocational programs
- The *level and sophistication of the training program* being offered
- The *methods used to follow up former students or trainees* to determine program impacts and student outcomes and the operational factors that influence this process.

To some extent, these operational differences are closely related and overlapping, but major issues related to each are noted below.

Differing Missions of Program Providers

The mission of the agencies providing vocational programs and services affects the objectives of such programs, the manner in which students are accepted, the methods used to provide instruction, and the emphasis placed upon measuring student outcomes.

Public secondary schools serve youths who may know little about what they want to do to earn a living. As noted earlier (Section 1), the mission of public schools encompasses providing learning experiences which will help students learn what they want to do as well as teach them how to do it. Obviously, the exploratory nature of this function has an impact on the objectives of the vocational programs offered within the comprehensive scope of this educational mission.

Regular vocational adult education programs should be offered in each community . . . as determined by need. They should not be evaluated by the number of completers or job placements.

Coordinator, Adult Education
Northern California

At the secondary level, as well as for adults who enroll, ROP/Cs have a more narrowly defined objective to teach occupational competencies than do comprehensive high schools. Therefore, the instruction given and the emphasis on specific occupational objectives lends itself more to the use of employment outcomes as a measure of program success than some of the vocational education offered within the traditional high school setting. Of course, there are exceptions to this; hence, the need to have clear program objectives.

Adult education has a tradition of serving the learning needs of adults for enrichment and continuing education. Vocational education is only one of the eleven program areas provided by adult schools. However, the fact that these vocational programs have not been the direct recipient of VEA funding has contributed to the lack of emphasis placed on student follow-up and identification of student outcomes in vocational programs for state reporting purposes.

As part of the placement rate concept, you should include criteria for measuring program success besides job placement, such as criterion referenced testing for meeting course objectives.

Program Manager, State Department of Education
Vocational Education Unit

Community colleges have the broad mission to provide transfer, general, and continuing education as well as vocational programs. Vocational programs offered by the community colleges have been aimed at adults as well as youths directly out of high school. Until recently, such programs have been tuition-free and open to all over the age of 18 who could benefit from instruction. At the same time, the mode of program delivery has been the traditional semester (or quarter) time frame which has not been conducive to meeting fast start-up and short-term training needs of students or employers. This has changed in the past few years, but the place of job training within the overall educational mission of the community colleges is still being formulated.

"There can be no doubt that the mission and function of California community colleges have changed over the years. Given the open-entry, open-exit nature of the institutions, it is progressively more difficult to understand this mission and function because, to a great extent, they are determined by the use to which the students put the colleges."

Steve Sheldon, Director
Statewide Longitudinal Study

JTPA programs have a clear-cut mission to meet the short-term training needs of their clientele and the employment community. As a result, measures of program success are narrowly defined and legislatively mandated. Much of the training appears to be aimed at entry-level and relatively modest-paying employment.

The Department of Rehabilitation has a broader mission than vocational training for its clientele. Many of its clients have special needs that require a broad array of counseling and special services. Because of this, the emphasis on tracking the relationship between job training and the employment status of its clients is only part of assessing the impact of its programs and services.

Private postsecondary schools are an important part of the delivery system for vocational education and training in the state, but its clients pay for the training. Some may receive state or federal assistance to help pay for it through Pell grants or other financial assistance programs. In order to stay in business in the competitive labor market, proprietary schools seem to target their resources on specific, short, intensive job training.

CONCLUSION NINE: The mission of the agencies offering vocational programs and job training influences objectives of specific programs and the operational manner in which such programs are delivered. The more narrow the mission of the program divider, the more likely employment-related student outcomes can be used as a means of determining effectiveness of a given vocational or job training program in a given area, at a given time.

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Common Vocational Program Objectives

After reviewing the goals outlined in the Perkins Act and state and federal legislation related to JTPA programs, as well as the stated program objectives developed by local program providers, nine general vocational objectives were clearly identified. One or more of these objectives would cover the expected outcomes for nearly all vocational education or job training programs offered by the seven agencies covered in this study.

These nine generic vocational program objectives relate to: 1) immediate job-specific preparation; 2) entry-level skills; 3) upgrading and occupational advancement; 4) retraining or training for career change; 5) apprenticeship-related instruction; 6) new or renewal of license or certification; 7) general employment preparation and exploration; 8) preparation for further education or advanced training; and 9) other planned program objectives. The latter category would apply to providing academic foundations necessary for employment, assessment and guidance services, or other instruction and services that enhance student success in gaining necessary competencies to gain, hold, or advance in employment.

Target Populations

The target populations are reflected by the mission of program providers. It is sufficient to say that vocational programs offered by all public educational agencies serve disadvantaged, handicapped, limited English-proficient students and other special needs populations. Some categorical VEA funding pays for special program efforts to meet the needs of these populations. However, these vocational programs are not targeted only for the disadvantaged as is the case for JTPA-funded programs.

Secondary schools serve youths who are generally under the age of 19. This age factor may affect their entry into the labor market perhaps more than their level of job skills; therefore, it must be given consideration when assessing placement rates of high-school-aged vocational students. Research indicates that there are five distinct types of vocational high school students ranging from those who concentrate in taking a large number of vocational courses to those who take only one or two courses—not enough to establish an area of occupational concentration. (Campbell)

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. . . in years past, the simple way to evaluate occupational programs was to determine how many were placed in meaningful jobs at completion of training. This is no longer true because (many) students no longer complete an entire program. . . .

Director of Occupational Education
Community College, Northern California

A statewide longitudinal study of entering community college students indicates that they fall into about 18 diverse prototypes of which five are oriented to vocational goals. Most vocational students in the community colleges enroll to learn or *improve specific occupational skills.* Follow-up studies have indicated that the group seeking to upgrade job skills reacted more positively to their community college experience than any of the other prototypes. (Sheldon)

National studies have shown that proprietary school students are more likely to be from an ethnic minority group, with lower educational status and poorer verbal skills than their public school counterpart. (Wilms) This is not a factor in determining eligibility for program entry in private postsecondary schools any more than it is in public schools, but it might explain the sizable portion of proprietary school students who received state and federal financial assistance for their training.

Job placement is a factor of the economic situation. It is not a measure of the quality of the program. . .

Specialist, COCCC

The diversity of the target populations served by each program provider has a direct impact on the type and level of training that is delivered and the array of student support services required to help ensure student success in their training programs. The implications for ultimate job placement success are also factors that need to be considered in the use of the placement rate concept. Low placement rates among youths and minority groups may be the result of employment factors outside the program rather than the result of the type or quality of the training given to such students.

CONCLUSION TEN: The characteristics of the student populations served by program providers have implications on the type and extent of assessment and counseling services that must be provided. Determination of interest, aptitudes, or the need of remedial or basic skills as a condition of proper program placement is an important factor in meeting the needs of the student and helping to enhance employment placement prospects.

Mode of Program Entry

Findings from this study and other research indicate that when the program providers screen applicants, they can increase program retention and enhance placements in related occupational fields for which training is provided. This appears to have been the case for higher-level training

in health occupations, high-technology programs, and programs leading to state licensing or certification.

As noted, JTPA programs are legally designed to serve the economically disadvantaged and eligibility for such programs must be determined prior to admittance. Public secondary schools and community colleges have no barriers to admission based upon economic, social, or ethnic considerations.

The mode of program entry for vocational programs appears to be at issue at the community college level more than any other vocational program providers. California administrative code (Sections 58100-58110) requires that community colleges admit all persons with high school diplomas or equivalent, and may admit those over the age of 18 who are capable of profiting from instruction. This has been called the open-door policy. California education code does permit community colleges to utilize reasonable academic prerequisites, demonstrated proficiency, or limits on health and safety in order to screen and/or limit enrollments in specific instructional programs.

CONCLUSION ELEVEN: The use of screening procedures for entry into vocational programs and job training can have an impact on student chances for success in the program and positive postprogram outcomes.

Aside from the screening process used by program providers to ensure program eligibility or proper placement in a vocational program, three other items of information were found to be essential to the use of the placement rate concept as a tool for program planning and evaluation at the local level. These were determination of 1) the educational status of trainees at the time of program enrollment, 2) the employment status of persons at time of enrollment in vocational and job training programs, and 3) determination of student intentions or expressed goals for taking a vocational program.

Retention in vocational programs and good job placement rates begin with proper student assessment for placement in occupational programs.

Student Services, Community College
Northern California

CONCLUSION TWELVE. Without information about the educational and employment status of vocational students at the time they enter a program and evidence of student intentions (goals) for taking their training programs, accurate, complete and useful information about the impact of the programs cannot be determined, especially for postsecondary-level students.

Level and Sophistication of Training

The Dictionary of Occupational Titles (DOT) classifies worker functions in relation to data, people, and things and indicates skill levels required for entry-level employment. Further levels of sophistication of training are reflected in the specific vocational preparation (SVP) codes assigned to each occupation. The SVP indicates the amount of time required to learn the techniques, knowledge, and facilities needed for average performance in various worker functions. This can range from a few weeks to ten years.

The days that can be devoted to vocational education in most high school programs are limited to about 180 per school year. This, combined with the increased emphasis being placed on academic requirements for graduation, reduces the time that can be devoted to elective or vocational subjects. This means that most vocational instruction is exploratory or at the entry level, with as little as 90 hours offered in one semester. ROP/Cs offer programs in two- to three-hour time-blocks each day, which means that more concentrated vocational instruction can be given during a school year. Adult schools and community colleges can offer training courses and programs that range from three to over 30 hours per week. Thus, in the latter case, the level of training can be more concentrated and more advanced.

Further complications occur in the course/program coding systems used by various program providers which inhibit easy identification of program level or sophistication. In California, secondary programs report data using Office of Education (OE) six-digit codes which have been replaced at the federal level by Classification of Instructional Program (CIP) codes. Community colleges use Taxonomy of Programs (TOPs) to classify instructional programs which are converted to CIP by the state for federal reports. Conversion of these various codes is accommodated by cross-code references published by the National Occupational Information Coordinating Committee. (NOICC: Vocational Preparation and Occupations) However, this conversion does not provide a clear picture of the level or sophistication of training. There is no state-level taxonomy for classifying all training programs. Most JTPA programs are designed for entry-level jobs.

CONCLUSION THIRTEEN: With different objectives, program titles, and program coding systems used by different program providers, it is difficult, if not impossible, to compare the level or sophistication of vocational programs among various agencies because program structure can range from one course to extensive and intensive training experiences covering several years.

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Student Follow-up Practices

Federal vocational legislation requires follow-up of vocational education students to identify program outcomes by sex, ethnic group, and special-needs populations. However, much of the information submitted to the state remains in data files and reports that are not analyzed or summarized in a useful fashion for either state or local planning. Thus, the current follow-up system meets VEDS requirements but seems to contribute little to program improvement at the local level. This point was verified by comments of local program providers, an examination of state VEDS records, information received from the National Center for Educational Statistics (NCES) and other states, and the results of the survey in this study.

The use of student follow-up by local program providers was covered in a survey conducted as part of this study. Table 2 (on following page) contains a summary of responses from 98 local education agencies (LEAs) regarding the conduct and use of student follow-up studies. Study team comments and observations about the survey results are shown on Chart 3.

Although most of the LEAs contacted (94%) conduct follow-up surveys, it is noteworthy that less than half of the respondents said that information about student goals was gathered. While the great majority use follow-up data for state reports (94%), less than half (43%) of all respondents said such data were used for agency planning, and about two-thirds said they were used for program planning (67%) and evaluation (63%).

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Geography or location should be considered a variable. Placement rates . . . should be defined so that a placement in San Diego can be attributed to training provided in Sacramento.

Manager, Employment Development Department

One of the serious problems reported by local program providers, especially at the postsecondary level, was the difficulty of keeping track of students who enrolled in some vocational programs. In secondary and ROP/C programs, students take vocational courses or programs in defined blocks of time and often there is close contact between a few instructors and the student. If a student leaves a program prior to completion, it is noted more readily than in some postsecondary programs which are diffused over several courses and instructors for a prolonged period of time. For example, in many community college business programs, students take two or three courses over several semesters and there is no way to track such students through a program easily, particularly when students attend in the evening. This situation not only makes it difficult to categorize students as completers or leavers, but makes it difficult to know when to follow them.

Components Necessary for a Comprehensive Student Follow-up System

The result of analyzing the follow-up practices of local program providers and federal reporting requirements indicates that a comprehensive student follow-up system that would provide adequate information for program planning and evaluation for state and local levels would require six components: These are:

1. Information on *target population characteristics* and training needs
2. Information on the *mode of program entry* for vocational students
3. Information on the *employment and educational status* of the student at time of entering the program
4. Information on the *designed objectives of the program* taken by the student
5. Information about the *expressed goals of the student* who took the vocational program
6. Information about the *postprogram outcomes* that includes the eight placement options recommended by this study.

See Figure 3 (in the Executive Summary Report) for a diagram showing the relationship between these components in a comprehensive student follow-up system that would accommodate the various circumstances of the program providers included in this study.

CONCLUSION FOURTEEN: Student follow-up systems must contain common data collection components and formulae for determining placement rates if they are to provide adequate placement information for program planning and evaluation or comparison of results among various programs at the local level or within a given delivery system.

PHILOSOPHICAL AND POLITICAL ISSUES

Substantial amounts of state and federal money have been allocated to vocational education and job training programs. It is understandable that funding agencies want to know which programs are most effective for the expenditure of limited resources. All of the philosophical issues involved with this determination are beyond the scope of this study; however, several elements were raised during the study.

Values, principles, and conflicting interests are associated with the use of the placement rate concept. The purpose of discussing them here is not to resolve them, but to present those which emerged as important to persons contacted during this study. Among the most germane were:

- The balance of authority between federal and state agencies and local program providers

TABLE 2

SUMMARY OF FOLLOW-UP PRACTICES AMONG SURVEY RESPONDENTS

REPORTED PRACTICES BY FIELD RESPONDENTS	Number and Percent of Responses by Type of Provider									
	SECONDARY (N=20)		ROP/C (N=26)		ADULT VE (N=7)		COMMUNITY COLLEGE (N=45)		ALL FIELD RESPONSES (N=98)	
	No.	%	No.	%	No.	%	No.	%	No.	%
1. Conducts Follow-up to Determine Placements—Yes	20	100%	25	96%	5	71%	42	93%	92	94%
2. Most Commonly Used Systems:										
2.1 VEDS	1	5%	4	15%	1	14%	39	87%	45	46%
2.2 FUSE	15	75%	9	35%	1	14%	–	–	25	26%
2.3 SAM	–	–	–	–	–	–	32	71%	32	33%
2.4 Other	10	50%	13	50%	3	43%	9	20%	35	36%
3. Time Frame for Student Follow-up:										
3.1 Under 6 months	3	15%	8	31%	3	43%	7	16%	21	21%
3.2 6-9 months	12	60%	15	58%	2	29%	26	58%	55	56%
3.3 Over 9 months	5	25%	7	27%	3	43%	13	29%	28	29%
4. Method of Follow-up:										
4.1 Mail	18	90%	16	62%	4	57%	41	91%	79	81%
4.2 Telephone	19	95%	25	96%	4	57%	19	42%	67	68%
4.3 Other	5	25%	3	12%	–	–	6	13%	14	14%
5. Who Conducts Follow-up:										
5.1 Instructors	6	30%	9	35%	1	14%	6	13%	22	22%
5.2 Clerical staff	14	70%	13	50%	3	43%	10	22%	40	41%
5.3 Counselor/Professor	5	25%	9	35%	3	43%	8	18%	25	26%
5.4 Administrators	10	50%	5	19%	1	14%	26	58%	42	43%
5.5 Other staff	3	15%	5	19%	1	14%	8	18%	17	17%
6. Follow-up Answers Are Verified—Yes	7	35%	11	42%	2	29%	11	24%	31	32%
7. Conducts Longitudinal Follow-up Study—Yes	2	10%	–	–	–	–	10	22%	12	12%
8. Uses Made of Follow-up Placement Information:										
8.1 State reports	20	100%	26	100%	3	43%	43	96%	92	94%
8.2 Agency planning	4	20%	19	73%	4	57%	15	33%	42	43%
8.3 Program planning	15	75%	22	85%	3	43%	26	58%	66	67%
8.4 Program evaluation	9	45%	24	92%	4	57%	25	56%	62	63%
8.5 Other uses	10	50%	4	15%	–	–	5	11%	19	19%
9. Identifies Student Goals/ Objectives for Taking VE Programs or Courses—Yes	13	65%	12	46%	4	57%	19	42%	48	49%
Categorizes Student Goals:										
9.1 Prepare for job entry/ new career	10	50%	12	46%	4	57%	14	31%	40	41%
9.2 Job change/career advance	8	40%	8	31%	4	57%	14	31%	34	35%
9.3 Improve current job skills	8	40%	10	38%	3	43%	11	24%	32	33%
9.4 License/certificate	7	35%	4	15%	2	29%	10	22%	23	23%
9.5 Improve/enhance skills, NOT for employment	6	30%	2	8%	2	29%	5	11%	15	15%
9.6 Further education/transfer/ advanced training	10	50%	3	12%	1	14%	11	24%	25	26%
9.7 Personal reasons	5	25%	3	12%	1	14%	8	18%	17	17%
9.8 Other reasons	4	20%	1	4%	–	–	3	7%	8	8%
10. Identifies Student's Job Status at Program/Course Entry—Yes	11	55%	10	38%	4	57%	16	36%	41	42%
11. Agency Has Job Development Function—Yes	14	70%	14	54%	4	57%	23	51%	55	56%
12. Provides Job Placement Services—Yes	18	90%	17	65%	6	86%	31	69%	72	[illegible]

Source: Data compiled by Cervell Education Management Planning, Inc., from written survey responses available August 17, 1984, and from telephone survey to secondary schools, September 1984. Only respondents from LEAs were included here.

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CHART 3

SUMMARY OF FINDINGS AND OBSERVATIONS ABOUT VARIOUS FOLLOW-UP PRACTICES
(Information Presented in Table 2)

Table 2 presents a summary of survey responses regarding student follow-up practices, placement activities, and use of follow-up survey results. Only respondents who were affiliated with local educational agencies were included in this tabulation and analysis.

FOLLOW-UP PRACTICES	OBSERVATIONS AND COMMENTS
1. CONDUCT OF FOLLOW-UP	A strong majority of all respondents (94%) said their agencies conducted student follow-up as a means of determining placements.
2. FOLLOW-UP SYSTEMS USED	VEDS and SAM were used most commonly by the community colleges. Secondary schools used FUSE, and ROP/Cs used their own systems. (ROP/Cs now have their own state reporting system using VE-80 series.)
3. TIME FRAME FOR STUDENT FOLLOW-UP	The most commonly used follow-up period was 6 to 9 months. A few agencies reported using more than one time period.
4. METHODS AND STAFF USED	A combination of mail and telephone were used by most. Community colleges tended to rely more heavily on mail (91%), ROP/Cs used telephone (96%), and the secondary schools used both (90%). Clerical staff were used most often to conduct follow-up by both secondary and ROP/Cs, and community colleges indicated they used administrators; overall, less than one-fourth used instructors to conduct follow-up. In agriculture programs contacted, a high proportion of teachers were involved with placement and follow-up activities.
5. VERIFICATION OF FOLLOW-UP RESPONSES	Less than 50% of any group verified follow-up responses. If they did, it was usually spot checks with employers.
6. LONGITUDINAL STUDIES	Some community college respondents (22%) reported using longitudinal studies.
7. USES MADE OF FOLLOW-UP	Dominant use of follow-up studies is to meet state reporting requirements (94%), although 75% of the secondary schools used them for program planning and half indicated other uses, such as for reports to advisory committees and local boards of trustees. ROP/Cs reported using results for program planning (85%) and evaluation (92%); 58% of the community colleges used them for program planning and 56% for evaluation. Data from follow-up were reported less often to be used for agency planning.

A statewide evaluation of vocational education in community colleges in 1981 indicated the need for improvement in two areas: 1) student follow-up procedures, and 2) use of student follow-up data (McGillicuddy). An ongoing study is currently in progress by the Chancellor's Office to improve student follow-up data which involved 14 colleges during 1983-84 and hopes to involve 26 colleges during 1984-85.

8. IDENTIFICATION OF STUDENT GOALS	Less than half the ROP/Cs (46%) and community colleges (42%) reported identifying student goals for taking vocational programs. Even though almost two-thirds of the secondary school respondents indicated they did, comments from interviewers indicated this was generally related to career education and post-high school planning. Of those agencies that do attempt to identify student goals, the categories most often indicated were job entry, job change/advancement, and improve job skills. Half the secondary school respondents indicated further education.
9. IDENTIFICATION OF STUDENT JOB STATUS	Less than half the respondents indicated they currently identified student job status at time of program entry.
10. JOB DEVELOPMENT	Over half (56%) of all respondents said that their agencies had job development activities. At the secondary level, this was often related to work-experience programs. Almost three-fourths of the field respondents reported that their agencies provided job placement services. On-site visits indicated that these services were often for part-time jobs while attending school.

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- The balance between the interests of students and needs of employers
- The need for fairness in applying the placement rate concept to program providers with different missions and functions
- The need to provide resources to local program providers to carry out state-mandated data collection functions
- The need to recognize the wide range of objectives among different vocational and job training programs
- The need to recognize the limitations of placement rates in assessing program quality.

These issues pose other serious questions: Can the information needs of state or federal policymakers be served by the same data system that meets the needs of local program providers? The answer is moot, but the basic question of the project advisory committee was that the needs of local program planning must be primary, though not the sole factor in any data collection system related to placement rates. This is the thrust of JTPA legislation and many believe it should apply in principle to the public school sector and other local program providers. There was strong feeling among many local program providers that unless the state could allocate resources for data collection, it should not be mandated.

Can the mission of local program providers be maintained in light of any state-level emphasis on a single measure of program effectiveness, such as placements? Can fairness be sustained in using placement rates as the criterion for comparing training programs offered by different agencies? Public secondary schools do not select their students, and community colleges operate an open-door policy. Therefore, any system related to the use of placement rates must be flexible enough to consider the mission and target populations of different program providers, yet consistent enough to be applied even-handedly to all programs.

Reactions to the Placement Rate Concept by Local Program Providers

Local program providers resist further state requests for information that might limit their own efforts to meet local training needs. Most persons contacted were in accord on the following positions.

1. Emphasis on placement rates alone ignores the multiple goals of vocational education.
2. Single-minded focus on attainment of high placement rates encourages recruitment and screening practices that lead to "creaming" of students who are most likely to succeed and gain employment—and a diminution of attention to students with special needs. This runs counter to the emphasis placed on serving the special needs of students, as mandated in the legislation.
3. Even when labor market information is used for program planning, employment of vocational students is often influenced by social and economic factors beyond control of the program providers; i.e., plant closures such as those in Salinas; electronic firms moving out of the Santa Clara Valley to lower labor cost areas; the lumber industry shutdown in Northern California. These are examples of factors that impact placements that are beyond the short-run control of any program provider.
4. The primary mission of educational agencies is to *prepare people for work, not to ensure job placement.* Political factors have been a prevalent influence in making local decisions about program additions, retentions, and deletions. Such forces as community interest groups, employers and professional organizations, and teacher contracts have to be considered.
5. Collection of placement data and student outcomes is time-consuming and costly. This is mandated, but is not paid for by state or federal agencies making the requests. The National Institute of Education (NIE) 1981 study of vocational education cited this in reaching the conclusion that VEA legislation attempted to accomplish too much with too few resources. Financial considerations are a practical as well as philosophical issue for public schools and community colleges with relatively low ADA (average daily attendance) revenues. For example, in 1982-83 among community colleges this ranged from about $1,700 to $5,600. Among ROP/Cs, the range was about $1,400 to $5,000. Adult schools averaged about $1,000.

Economic conditions, wage rate fluctuations, consumer demand, corporate decisions all impact long- and short-run placement rates. Let's look at program quality and how to insure that it exists. (Job) placement may have little to do with program quality.

ROP Director, Northern California

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6. Placement rates are one indicator of program quality, but by no means the only one. Placement is an indirect indicator of quality because of external factors that directly affect labor market opportunities in any given occupation or geographic area at any given time. Yet, most vocational educators recognized the importance of placements as a measure of quality (Bottoms) Further, it must be understood that quality is not self-defined. It is defined by agreed-upon objectives and standards of performance. A step in this direction was taken in the guidelines for measuring quality developed by the Association of California School Administrators, Vocational Education Committee, which clearly defined job placement and student follow-up as indicators of quality in vocational programs.

Conceptual Model for Considering Program Objectives and Student Impacts

Clearly, no single response exists to the philosophical issues raised by those interviewed in this study. Nor can the technical, definitional, and operational barriers discussed in this report be entirely eliminated, but an investigation of the issues reveals a conceptual model which can be an alternative to the single emphasis on placement rates.

An analysis of the objectives and student impacts of vocational and job training programs indicates that they share common ground in terms of student impacts and measurable outcomes. These are 1) educational impacts on students; 2) employability preparation of students; and 3) economic impacts for students once they leave the program. Not all impacts are measurable in the short run, but many can be determined by an analysis of program records, follow-up of students, and contacts with employers.

An example of the type of student impacts that might be used in relation to each of the three areas noted above and the means for measuring these impacts is presented on Chart 4. This chart shows that potential educational impacts for students can range from acquisition of basic skills to improved knowledge of economic and labor market conditions and problem-solving skills. The corresponding measurable program outcomes can be obtained from test results, checking school and program records for program completion, and checking on student advancement in further education and training.

The employability preparation impacts accrue as a result of instruction or counseling while the student is still in the program. Students may gain knowledge about job search skills, specific entry-level competencies, or improvement of occupational skills for a job already held. Measurable outcomes can be documentation of program completions, student follow-up survey results, or contacts with employers.

15 CONCLUSION FIFTEEN: Criteria for assessing vocational education and job training should include three areas of student impact and measurable program outcomes. These are educational, employment preparation, and economic. The relative importance of each will change, depending on the type and level of program and the designed program objectives. See Figure 4 and supplemental information of student impacts and program outcomes.

Economic impacts on students result when they convert the knowledge, attitudes, and competencies to gaining, holding, or advancing on a job. Measurable outcomes can be determined through follow-up procedures that identify placement in related, partially related, or unrelated jobs, wage changes, and removal from public assistance.

The conceptual model shown in Chart 4 can be used in vocational programs or job-specific training programs. The items appearing on the chart are not exhaustive but illustrative. The relative importance of the student impacts and measurable program outcomes will change by the type of training program and characteristics of the students. The change in relative importance of educational impacts or economic impacts is illustrated in Figure 4 (in Executive Summary Report). This illustrates that educational impacts and program outcomes might be of greater importance in certain beginning, general, or introductory vocational programs than they are in intensive job-specific training. But in neither case is there no importance of economic or educational outcomes. The model should be viewed as a sliding scale rather than absolute. The degree to which the educational, employability preparation, or economic impacts are important must be determined by the designed program objectives and the expressed goals of the students.

CHART 4

CONCEPTUAL MODEL OF POTENTIAL STUDENT IMPACTS AND OUTCOMES BY TYPE AND LEVEL OF VOCATIONAL AND JOB TRAINING PROGRAM

TYPE AND LEVEL OF PROGRAMS BY PROGRAM PROVIDERS	POTENTIAL PROGRAM IMPACTS FOR STUDENTS	POSSIBLE MEASURABLE PROGRAM OUTCOMES
I. EDUCATIONALLY RELATED IMPACTS AND OUTCOMES FOR STUDENTS		
SECONDARY AND SELECTED POSTSECONDARY-LEVEL PROGRAMS . High School Vocational Education . ROP/C Preparatory Training . JTPA-Funded Youth Programs . Selected Community College Vocational Programs . Selected Adult VE Programs . Others	• Acquisition of BASIC SKILLS in communications and math • Increased interest in school • Better understanding of educational options • Improved awareness of occupational or career options • Improved knowledge of economic and labor market conditions • Improved problem-solving skills	• Test results • Retention in school • Returning to school • Program completion • Continuing in more advanced education or training RELATED to training • Continuing in advanced education or training NOT RELATED to training
II. EMPLOYMENT PREPARATION RELATED IMPACTS AND OUTCOMES FOR STUDENTS		
SECONDARY AND POSTSECONDARY-LEVEL PROGRAMS: . High School Vocational Education . ROP/C Preparatory and Supplemental Training . Community College Vocational Education and Job Training . Adult Vocational Education Programs . JTPA-Funded Youth and Adult Programs . Others	• Acquisition of employability skills (job search, resume writing, interviewing, etc.) • Acquisition of entry-level job skills • Improved job/occupational skills and competencies • Improved self-confidence related to work competencies and employability	• Program completion/certification • Obtaining/maintaining external/state license or certification • Occupational advancement or desired career change • Improved job satisfaction for students • Employer satisfaction with students hired from training program
III. ECONOMIC IMPACTS AND OUTCOMES FOR STUDENTS		
SECONDARY AND POSTSECONDARY-LEVEL PROGRAMS: (Same as those noted for Employment Preparation)	• Acquisition of marketable job skills • Improved occupational competencies • Improved competitive position in labor market or in workplace—shortened learning curve • Improved prospects for career advancement • Improved prospects for increased earnings on the job	• Placement in occupations RELATED to training • Placement in jobs partially or NOT RELATED to training • Retention of desired employment • Improved wage/salary levels • Removal from Public Aid

Source: Chart compiled by Carvell Education Management Planning, Inc., Los Altos, CA. September 1984.

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4. Uses and Alternatives

BACKGROUND OF PLACEMENT RATE CONCEPT

The placement rate as a concept is one part of the ongoing planning loop for vocational and job training programs. To modify programs to meet needs of students and employers for the efficient utilization of resources requires information about student outcomes as well as labor market information that provides data about job opportunities.

The use of a single indicator of vocational and job training program success is attractive because it seems to be results-oriented rather than process-centered. This attitude seems to be kindled by the belief that data collected for JTPA programs are more precise and valid than those generated by vocational education for VEDS or locally designed systems. Careful review of the state-level data collected for JTPA does not support this perception.

The idea of using a placement rate concept is not new, nor is the idea of matching the supply of trained individuals to related net job openings (demand) in a given labor market.

In California, the attempt to use data that would help program planners better match vocational program completers with labor market needs began in the early 1970s with development of the California Manpower Management Information System (CMMIS) in Ventura County. Later this concept was converted to the California Occupational Information System (COIS) and fell under the auspices of the COICC. The supply/demand model implications for both CMMIS and COIS had limitations as a reliable planning tool. That model was based on some theoretical assumptions about the complex relationship between future labor market job opportunities and availability of trained people to fill employment needs. It has not been a reliable or practical means for determining program outcomes or student impacts, thus the need to examine the placement rate concept which measures the placement of program completers (or certified trainees) in actual jobs or other valid program outcomes. (EDD, LMI Subcommittee Report)

Use of Placement Rates in Other States

California is not alone in its search for a means of effective program planning based on identification of comparable placement rates. Other states have explored the use of placement rates to depict the success of vocational programs. Of seven which were contacted, three had adopted various applications of the placement rate concept. The experiences of these states are summarized below. See Appendix B for further details.

- **Florida** – This state uses a differentiated funding formula for preparatory vocational programs. In 1982-83, the legislature approved a 70-percent placement rate for secondary and postsecondary programs to be achieved by 1985-86. This includes community colleges. Thus far, the state office of education has found that many programs failed to achieve the mandated placement rate and are seeking changes in state legislation because it is seen as unrealistic for all vocational education programs.
- **Michigan** – This state uses job placement rates in relation to statewide employment demand for secondary school vocational program completers. Placement results are one of three factors in a formula for ranking and funding programs, but no set placement percentage is used in this assessment process. Based on program priorities established by employment demand, all programs are ranked and funded within the limits of available funds. Statewide competency-based curricula are used for vocational programs. Currently, postsecondary programs are not included in the use of placement rates as a funding priority.
- **Minnesota** – A 51-percent placement rate is used to assess VEA-approved programs offered by Area Vocational Technical Institutes (AVTIs) at the postsecondary level. Other large vocational program providers are not included in this system, i.e., adult schools and community colleges.

Information from other states indicates that the placement rate systems that have been adopted are still in the process of refinement. Oklahoma, which used the placement rate concept as part of a productivity rate, has rescinded its use, even though the state generates placement information in graphic form for use in planning at the local level. Oklahoma is now identifying how it might be used again as one of the productivity indicators of vocational programs in the state.

USES OF PLACEMENT RATE INFORMATION

Placement rate data for specified vocational or job training programs could be used by both state and local program providers for 1) program planning, 2) program improvement, 3) program evaluations, and 4) assessing program quality.

Program Planning

Placement rates could be used by local program providers in the following ways:

- Comparison of all vocational programs offered by the same provider for a given time period. This would indicate differences in placement rates among various programs.

- Comparison of the same program placement rates over different time intervals. This would indicate changes over time that could be used to establish priorities for program reduction, expansion, or curtailment.

This information would need to be augmented by input from advisory committees, available labor market information, employer surveys, and student feedback from follow-up studies.

Program Improvement

Program improvement is a constant process of changing program content to keep it current and ensure that industry standards for job performance are used in the preparation of trainees. Job placement rates are an indicator of the need for change in programs but do not themselves indicate what such changes might need to be. The latter information must be obtained from the employment community through job task analysis and evaluation, employer input, and student feedback.

The issue is not that it would be nice to know what happens to vocational students after training, it is an obligation to know—leading to program modification.

Researcher, Vocational Education
Northern California

Program Evaluation

As in the case of program improvement, placement rates are an indicator of program performance; additional information from former students and the employment community is required to determine whether programs met program objectives, student goals, and employer expectations.

Program Quality

Few vocational educators deny the importance of job placement as a program outcome, but few accept it as the sole or major criterion for judging vocational program quality or effectiveness. Although recent literature is repleat with the use of job placement rates as one measure of program quality, it is deemed an indirect indicator of quality because of the intervening external factors that are beyond control of the program provider.

The major indicators of program quality include adequate funding levels; articulation and coordination with other training providers; instructor qualifications; close ties with business, labor, and governmental employers; availability of assessment and counseling services; student follow-up; and, finally, elimination of programs with continued poor placement rates. (Bottoms and McKinney) Other guidelines for program quality are reflected in facilities, equipment, use of advisory committees, and attention to special needs of students (Hobson), which may include basic education and developmental experiences to overcome various handicaps and attitudinal problems that prevent them from succeeding at work.

It should be apparent that job placement rates are not the only factor needed to achieve program planning, improvement, and evaluation and to assure high program quality. Further, the alternatives to the placement rate concept noted above are potential sources of data that would improve all of these. The combined use of hard data and multifaceted planning techniques can achieve better results in meeting student needs and labor market requirements for all program providers.

ALTERNATIVES TO THE PLACEMENT RATE CONCEPT

Placement was deemed an important factor in local program planning, even though the placement rate concept was not found to be currently feasible as a state-level tool for comparing or assessing vocational and job training programs offered by different program providers. Other alternatives were identified as potential sources of supplementary information for program planning and evaluation. Six alternatives are discussed below.

A Mandated Percent As a Minimum Placement Rate

A mandated percent as a minimum placement rate, such as that used in Florida, has been suggested as a means of improving job placements in vocational education. The same logic is applied to JTPA programs on the basis that such programs strive to meet economic rather than social goals.

This mandated flat rate has been used for determining funding in other states, but it is not a planning tool for program improvement. It does not consider other legitimate, positive program outcomes for vocational education. Furthermore, there is no guarantee that a mandated rate would improve placements. It might alter the way job placement data are derived, but as a planning tool, other criteria would need to be applied. Even if this percent were adjusted for institutional mission and economic conditions, it would provide no guarantee of program quality. Local demand could override quality of training; thus, a poor program in a strong demand area might have higher placement than a higher-quality program in an area with weak demand. Even though the size of the program with a lower percent of placements might be restricted, circumstances may warrant continuation of the program when external factors are weighed, such as demographics of the community, cyclical nature of the local economy, growth of the industry, and the transferability of skills. It is also possible that poorly trained workers in a high-demand area may find employment in the short run, but find that their upward mobility is blocked. In sum, a flat

percent rate as a minimum placement rate would not provide the data necessary for program improvement or comparability.

Supply/Demand Ratio

Simply stated, this model attempts to bring supply into balance with demand by increasing or decreasing vocational and training programs so that the number of completers matches labor market job opportunities. This process is encumbered by numerous difficulties ranging from the lack of accurate data for either side of the equation to the fact that many training programs prepare students for more than one occupation. Interoccupational mobility also complicates the analysis of net training-related job openings. (Young)

We need to tie student follow-up information to labor market information, but that piece of information is not in very good shape either.

Associate Dean, Occupational Education
Community College, Northern California

Reservations about the quality of supply and demand data have been raised by those who generate them as well as by those who would like to use them. (CACVE, Call for Action) For example, all program completers are not available for job placement, and the number of program completers is not a reliable indicator of supply because there are occupational transfers and new labor market entrants who did not take training from one of the program providers included in the data base of the system. Second, vocational and job training completion can denote different levels of competency and readiness for occupational entry.

For these reasons, the simplistic and traditional supply/demand ratio model was not found to be a sufficient or accurate tool for vocational program planning or assessment.

Unemployment Rates By Occupation

Determining unemployment rates by utilizing occupational data is one method that might provide necessary information for program planning. The Bureau of Labor Statistics (BLS) provides a monthly current population survey (CPS) to states. This report computes an occupational rate based on a national household survey. This survey is supplemented yearly with national unemployment data by occupation. These annual data which are not restricted by or based on unemployment insurance data provide information about unemployment by occupations nationwide.

The annual reports, as well as the monthly reports, provide data that may assist in state planning by providing warning signals that should be considered when forecasting job opportunities. Whether the usefulness of the monthly and annual data for state planning weighed against the cost of obtaining the data is the best use of resources for planning purposes related to job opportunities is beyond the scope of this study. However, the occupational data currently provided on an annual basis about unemployment rates may be of limited value for local planning of vocational programs when determining future job opportunities because the data are derived by national sample. Size of industry and local concentration of that industry would determine usefulness of the data for local purposes; however, local resources could probably provide a more accurate picture of local job opportunities. The cost of providing the CPS annual unemployment data at a level that would be useful to local planners of vocational and job training programs would be prohibitive and not necessarily timely due to the lag between collection of the data, analysis, and publication.

Use of Unemployment Insurance Claim Data and IRS Income Data

The use of unemployment insurance claims to determine those not employed in an occupation could give some broad indicators of oversupply of workers within an occupation. One of the weaknesses of these data is that exit rates from occupations are not considered. Persons may leave an occupation for reasons other than layoff—working conditions, insufficient training, lack of advancement opportunities, poor wages or salaries, and personal conflicts. These reasons may also lead to poor performance which results in firing and unemployment claims. Unemployment rates by occupation do not consider the total supply of trained workers for the occupation.

These data would be of limited value for state or local program assessment because they consider only one group, the unemployed, in the potential supply of workers. The self-employed would not be included. Unemployment claims would not provide the basis for comparing the performance of one type of program provider with another. This might be achieved by having program providers submit a list of the social security numbers of all program completers or certified trainees to the EDD so that unemployment insurance claims could be sorted by the numbers. Information which results might indicate if former students of vocational education programs or clients of job training programs comprise a lesser percent of the unemployed in a particular occupation than other groups or the labor force at large. Recency of training would be a factor in the usefulness of the data for program planning. The feasibility of this approach and the massive data processing task would require further investigation.

State or regional unemployment information might provide a broad indication of occupational fields for which demand had declined, but this could be distorted in cases of dramatic worker layoffs resulting from closure of large enterprises such as the automobile plants in Fremont, Milpitas, and Los Angeles.

Studies which match social security numbers to IRS income data have been attempted and can supply information about persons who have taken vocational education programs or been involved with job training. These studies have three major limitations: the lack of an ongoing information base, little information that indicates whether the income generated is related to the skills learned in training, and lack of information about the number of hours worked to generate the income. This latter problem is particularly true when persons hold multiple jobs.

Wage Data Analysis

One way to look at demand for and supply of workers is to analyze wages (and salaries) as an indicator of labor market conditions. This requires empirical data to track the wages over time to determine changes in wages in a particular occupation relative to other occupations. At least two factors need to be considered: entry wages and wages of experienced workers. If the rate of change for entry wages is increasing faster than the rate of selected occupations, there may be a demand for workers in the occupation and new or expanded training and vocational programs which prepare entry workers may be warranted; if the wage rate of experienced workers is increasing at an accelerated rate relative to those for experienced workers in compared occupations, programs which offer upgrading in the occupation may be warranted. (Occupational Outlook Quarterly)

Wage and salary data analysis offers potential information for state program planners to identify possible demand and changes within occupations and to determine variances in labor market areas. These data could assist local planners, but they should be used as only one indicator of possible change in the market because methods of collecting the empirical data may be biased when smaller labor market areas are used. At both levels, it is only one indicator which should be supplemented by other data.

Employer Estimates to Determine Employment Demand

Employer estimates about expected job openings within an occupation usually are biased and tend to be overstated for several reasons: first, individual employers often vie for the same market segment—thus, one company's gain and expansion may be at the expense of another company, resulting in no net gain in demand for employees; second, business forecasts tend to be positive and growth-oriented; third, most employers predict the future as similar to the present and this may not be true. (EDD, LMI Subcommittee Report and Occupational Outlook Quarterly)

Local program planners should continue to utilize information from employers, but should exercise caution when determining need based on employer feedback and should supplement these data with information related to placements in related occupations, comparative wage data, general levels of employment, the characteristics of the occupation (seasonal, cyclical), the availability of training from other providers of programs, predicted industry and occupational (I-O Matrix) growth rates, and the costs and placement potential of alternative programs.

Follow-up of employers to assess the success of former students of vocational education and job training can provide an avenue for identifying needed changes in programs which can lead to program improvement.

CONCLUSION SIXTEEN: Even though some alternatives investigated as part of this study would provide data needed to project occupational opportunities, none would, by itself, provide all the information necessary for program planning and evaluation. Some alternatives would not provide data related to specific program providers; others would not be related to definable labor markets and job opportunities. None would provide information that could lead to changed program content or instructional methods which would result in program improvement.

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USE OF STUDENT FOLLOW-UP DATA

The alternatives discussed above can contribute to program planning. However, the basic method of obtaining information about program outcomes and student impacts remains student follow-up in one form or another. Certainly, program improvement and evaluation require input from employers who have made it known that they will judge the people they hire not only by how well they perform in entry-level jobs but how well they progress at work. Modes of obtaining employer input can vary from advisory committees to employer surveys.

Student follow-up systems that are limited to job placement patterns give an incomplete picture of program effectiveness because they do not address the need for additional information for program planning and improvement.

Information about earnings, job satisfaction, and employment progression are factors that need to be included. (Abramson) Student reactions about the value of training to their employment and career objectives should also be collected. The student follow-up systems reviewed in this study (FUSE, VEDS, ROP/Cs, etc.) contained factors that partially meet these data needs. For local program planning and improvement, all need to incorporate some additional data elements related to the eight postprogram placement outcomes suggested in this study as well as factors pertaining to expressed student goals in order to provide a better picture of program impacts on students.

For purposes of determining placement rates, program completers are the commonly required unit of analysis; however, for purposes of identifying information for program improvement, both completers and leavers should be followed. Finding out what happened to persons who

did not finish a program can be as valuable as documenting placement outcomes for completers. The student employment survey being developed and pilot tested for California community colleges (Brooks) already contains most of the elements suggested in this study and the other systems can adapt the necessary elements.

ESTIMATING COSTS

In an effort to find available information about costs for obtaining placement rate data and to determine possible alternatives, federal, state, and local contacts were made and a review of the literature was undertaken. The results indicate that little accurate cost information is available.

At the time of this study, the National Alliance of Business was conducting two massive surveys about JTPA placements, but no data were available on the costs of placements. (White, interview)

The costs of longitudinal studies have been estimated by NCES. These costs ranged from $40 per return to get a 55-percent response rate (i.e., first letter, second letter and follow-up mailgram) to over $100 to reach the 90- to 95-percent return level (i.e., telephone contact after no results from written requests). These figures would include materials and time to obtain the data. Costs can be even higher with difficult-to-reach populations. (Korb, interview)

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Few program providers were accurately able to forecast the costs of follow-up. One problem was determining what was to be considered a cost: one-time, start-up; ongoing operational; total costs; costs per usable return or costs per student.

Local cost estimates for student follow-up ran from $0.40 to over $4 for materials and telephone calls but did not include staff time, programming, analysis, and presentation of data. One ROP/C director suggested that a minimum percentage of the funds allocated for vocational education be set aside for this activity if accurate, timely data are to be obtained. This same reaction was obtained from the community college administrator who expressed the opinion that in a time of limited resources, follow-up in programs from which it is difficult to obtain feedback would be given a low priority by many colleges until categorical funds were allocated for this purpose.

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One national study suggests that if dollars were to be assigned to follow-up, a bottom limit on the amount that had to be spent would probably be more practical than to set an upper limit. (Asche and O'Reilly)

The state makes ongoing attempts to improve its planning data, but has found that it is costly to do so. About $210,000 has been allocated by the COCCC for the involvement of 26 colleges to implement an employment survey. SDE indicated that it would have cost over $80,000 to move the FUSE system from its current contractor's data base to the state's computer data base. As a result, it was determined to be cost-efficient at the current time to continue to contract for FUSE.

The COCCC student follow-up of employers (2,500) and student classroom survey (6,000) is estimated to cost $1 per student to get about an 80-percent employer return. This cost includes the student survey (classroom administered), employer questionnaire, mailing, cost of supplies such as envelopes and labels, and data entry time. No report writing, coordination, or analysis time are included in the estimate.

SDE worked with ROP/Cs to develop the VE-80 series to improve student follow-up. SDE estimated that a one-time expense for programming was $26,000, and another $10,000 was used to test and implement the system. This was in addition to $23,000 to develop an ROP/C course inventory. State costs for updating the system as well as local costs of data collection were not known.

The CMMIS study to develop the supply/demand model cost over $1 million before it was determined that it was not feasible.

CONCLUSION SEVENTEEN: Data are not available which reflect all costs of obtaining placement data and other information needed for ongoing program planning, improvement, and evaluation at either the local or state level.

In sum, there are no accurate estimates of all costs to develop alternatives to the placement rate concepts. Identification of all the elements involved in the data gathering and analysis was beyond the scope of this study. However, labor market data generation is already the charge of EDD and follow-up of VEA program completers is mandated in the legislation. Costs to individual deliverers of programs will vary and depend on multiple factors such as size of the program and its complexity, number of programs offered, availability of data from other sources, growth in the labor market area, numbers of other deliverers who generate information that might be shared, demography of the populations served, availability of personnel to perform the necessary tasks. The methods of collecting and sophistication of the data analysis—computer or manual, written or telephone contact—will change costs.

CONCLUSION EIGHTEEN: Any statewide system to assess outcomes from vocational education and job training so that comparisons among programs could be made would require a massive manipulation of data which would increase costs at both state and local levels.

IMPROVEMENT OF PLACEMENT RATES

By design, the focus of this study was on the feasibility and use of the placement rate concept. Student and employer follow-up are the principal means of obtaining data to determine placement rates. Alternatives to the placement rate concept discussed earlier in this section provide

additional ways of projecting or providing information that is useful for program planning at the state or local level. However, none of these will improve placement rates for students unless the information is transformed into action by the program providers. Federal vocational education legislation requires student follow-up, but it does not mandate that programs provide placement services for students.

Job search skills should be a part of every occupational training class . . . The assumption is that if you know how to do a job, you also know how to get a job. This is not so, especially if you have not been trained to do so.

Director, Instructional Support Services
Union High School District, Southern California

External factors beyond control of the program provider do affect placement rates, but research also shows that those vocational and job training programs with comprehensive placement programs and services have demonstrably better placement rates than those without them. A growing number of states have recognized this reality and taken action to strengthen such services by allocation of funding support, technical assistance, and staff training efforts to improve and expand placement programs as part of the job preparation programs that are offered. (Barrow) Perhaps this direction would be a fruitful one for improving the placement rates for all program providers in California. If the real goal of the state is to improve placement rates for vocational and job training students, it deserves consideration and proper study.

Part Three The Appendices

Appendix A – Bibliography

Appendix B – Information From Other States Related to the Placement Rate Concept

Appendix C – Placement Rate Definitions and Procedures Survey

Appendix D – Survey Responses and Contacts By Agency

Appendix E – Programs and Agencies Visited By Study Team

Appendix F – Interviews Conducted for the Gathering of Information Related to the Placement Rate Concept

Appendix G – Table G-1: Percent of Survey Respondents Who Agree With General and Specific Definitions That Could Be Used for Various Placement Rate Concepts

Glossary of Acronyms

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APPENDIX B

INFORMATION FROM OTHER STATES RELATED TO THE PLACEMENT RATE CONCEPT

State Contacted	State Use of Placement Rate Concept	Comments
FLORIDA	USED for secondary and postsecondary schools, including the community colleges.	Florida legislature was the first to mandate job placement and follow-up services for public school students (1973). A study found that little use was made of follow-up data at the state level; whenit was used, it was primarily for compliance. In 1982-83, the State Board of Education decided to attach a rate to funding for programs: 50% for related jobs of secondary and 60% for related jobs of postsecondary *completers*. Schools had three years to come to this rate. However, the state legislature said the set rate was not high enough, so attached a 70% rate commencing with 1985-86 completers. PROBLEM: In the first year, about 1,000 programs (10%) of the state's programs did not reach the lower goal. The Board of Education is now in the process of trying to get the legislature to amend its requirements for 1985-86. PROBLEM: There is a dichotomy of thinking about secondary programs, in that many vocational educators at state and local levels believe that placement is not and should not be the primary goal of secondary programs. One of the intents of the legislation was to force a definitive statement about programs in terms of saying whether a program was supplementary or preparatory. Auditors were grappling with the issue of funding in programs that were primarily supplementary; the state was funding some of these programs to be preparatory at a premium of up to 1.9 premium for industrial education. One of the perceived benefits of the placement rate is to stop counselors from plugging students into programs for which they have no aptitude or interest.
GEORGIA	NOT used by state for any type or level of program provider.	Georgia State Department of Education does not establish criteria for placement rates. VEDS follow-up data are collected and compiled for compliance reports to federal agencies.
ILLINOIS	NOT used by state for any type or level of program provider.	In Illinois, placement rate concepts as a method of allocating funds were studied and rejected. Instead, priorities were placed on the development and implementation of guidance and placement services for vocational students.
IOWA	NOT used by state for any type or level of program provider.	The Iowa Office of Public Instruction does not collect any placement information from secondary or postsecondary institutions, other than VEDS follow-up data which are used for compliance reports to federal agencies.
MICHIGAN	USED for secondary schools, but no other program deliverers in the state.	Michigan uses a matrix format for ranking programs; funding is based on this matrix using data from statewide employment demand, statewide-related placement, and a demand/supply ratio. They rank-order occupations and funds based on the highest ranking. All programs by the same title have the same list of statewide competencies. They have a computerized job match to program competencies. It is exclusively for secondary programs, and it is master contract driven and thus no reward for earlier finishes, so it is locked into clock hour/seat time.
MINNESOTA	USED for Area Vocational Technical Institutes, but no other program deliverers in the state.	VEA-approved programs in the postsecondary Area Vocational Technical Institutes (AVTI) use a 51% directly related placement rate. If they don't reach it, they are placed on probation. PROBLEM: What is a related placement—by whose criteria (students, employers, teachers, administrators)? PROBLEM: The largest deliverer of vocational programs in Minnesota falls outside the approved VEA program area in the continuing education adult vocational programs in which no placement rate is used for funding and little evaluation of programs is made.

State Contacted	State Use of Placement Rate Concept	Comments
OKLAHOMA	NOT used by the state for any type or level of program provider.	At one time Oklahoma used a productivity index to determine funding for vocational education and for program evaluation; it is not currently being used for funding or evaluation. BUT there is more and more talk of returning to some form of it as funding tightens. The productivity rate included more than completers placed in related jobs. It included those continuing their education. Oklahoma still collects placement data and does a good job of graphically feeding it back to the local district administrators, teachers, and advisory councils. It compares local programs with state averages, but no evaluation is attached to the rate—EVALUATION is based on competencies attained. HOWEVER, low enrollments and low placements in a program could mean that locals could start a program and not receive any state funding for it—local dollar still accounts for 50% of funding for all programs.

NOTE: Information received from other states indicates that when a placement rate related to approval and/or funding is used, placements are for those who complete a program and are placed in related jobs.

OTHER STATES WITH PLACEMENT PROGRAMS, BUT WHICH DO NOT USE THE PLACEMENT RATE CONCEPT	The Texas legislature appropriated funds in 1975 for job placement services in local districts. Missouri has a statewide job placement service. Ohio has several models and resources for job placement, and the legislature reviews job placement programs to gather information related to funding programs. Delaware, through a combination of legislation and community action, supports job placement programs for students enrolled in general education programs, but not in vocational education or college preperation.

APPENDIX C

PLACEMENT RATE DEFINITIONS AND PROCEDURES SURVEY

The California Occupational Information Coordinating Council (COICC), in cooperation with the State Department of Education and the Chancellor's Office, California Community Colleges, is sponsoring a study of the use of the placement rate concept as a means for assessing, comparing, and improving vocational education programs in all occupational areas and at all levels. This survey is an important part of the study aimed at identifying those factors that should be a part of the placement rate concept options for VOCATIONAL EDUCATION (VE) and JOB TRAINING (JT)* programs offered by public secondary and postsecondary institutions. (*JT is usually more intensive job specific training of shorter duration than vocational education.)

This survey form contains three sections. Answer questions in Section I, then respond to items in Section II following the directions shown. After completing Section II, respond to the questions in Section III. YOU ARE TO RESPOND TO ALL CONCEPTS AND DEFINITIONS regardless of your agency affiliation.

SECTION I: *Description of Respondents* (Circle the number of the response that most accurately indicates your position and agency affiliation.)

Your Position: 1 School/Agency Administrator 2 Professional/Technical 3 VE Instructor/Counselor 4 Other _____

Agency Affiliation: 1 Secondary Schools 2 ROP/C 3 Adult Ed 4 Com. Col. 5 JTPA 6 EDD 7 Other _____

Level of Organizational Responsibility: 1 State 2 County 3 District 4 School/College 5 Program/Service 6 Other _____

Your Name/Title _____ Telephone ( ) _____

Agency Name and Mailing Address _____

_____

_____

_____

SECTION II: *Placement Rate Concepts and Definitions*

Directions: Column 1 lists various placement rate CONCEPT options. Review each option and decide whether or not it should be used to help determine vocational and job training program outcomes and impacts. Use the answer column (3) to record your response for each listed CONCEPT by placing a circle around the number of the response you want for VE programs and use column (4) for JT programs.

Column 2 outlines DEFINITIONS for each concept. Read each definition and indicate whether it is acceptable to YOU or the agency/institution/program with which you are affiliated. Use column (5) to record your response. If the definition is NOT acceptable to you or your agency, use the space provided on this form to indicate the reason(s) why it is not acceptable and provide any suggestions that would make it more acceptable. If you have other ideas for placement concepts that are not listed, add them in the space provided under OTHER at end of list of concept options.

Columns 6 to 11 contain the various types and levels of vocational program deliverers included in this study. Look at each one and decide whether the placement rate CONCEPT shown in (1) should apply to each [illegible]. Circle the number of each deliverer for which the CONCEPT should apply. DO NOT circle the number of any program deliverer for which the CONCEPT should NOT apply or for which you are uncertain.

Definitions COMPLETERS are persons who have satisfactorily finished and/or met defined course/program objectives. LEAVERS are persons who leave a course/program prior to achieving defined objectives or achieving minimum skills needed for employment. Former students (completers/leavers) should have been enrolled in the most recently concluded course/program/training session within the past year. HS refers to comprehensive high schools. JTPA is Job Training Partnership Act.

Placement Rate CONCEPT Options (1)	DEFINITIONS for Placement Rate Concepts for Defined Vocational/Job Training Programs (2)	CONCEPT Should Apply to: VE (3)	CONCEPT Should Apply to: JT (4)	DEFINITION Is Acceptable YOU or Your Agency (5)	Program Providers to Which This CONCEPT SHOULD APPLY: (Circle number of Program Providers) HS (6)	ROP/C (7)	Adult VE (8)	Com. Col. (9)	JTPA (10)	Others (11)
1. DIRECT/ RELATED EMPLOYMENT	a. Former student COMPLETER or LEAVER* is employed full- or part-time in an occupation/ field in which job skills used at work are directly related to those learned in VE or JT program	1 YES 2 NO 3 ?	1 YES 2 NO 3 ?	a. 1 YES 2 NO 3 ?	6	7	8	9	10	11
	b. Former ROP/C COMPLETER/ LEAVER is employed full- or part-time in an occupation within the 6-digit OE program code or in an occupation within the 4-digit OE code which pertains to the occupational area**	1 YES 2 NO 3 ?	1 YES 2 NO 3 ?	b. 1 YES 2 NO 3 ?	6	7	8	9	10	11
	c. Former community college COMPLETER/LEAVER is employed full- or part-time in an occupation within the 5-digit TOP code to which vocational/job training pertains	1 YES 2 NO 3 ?	1 YES 2 NO 3 ?	c. 1 YES 2 NO 3 ?	6	7	8	9	10	11

* If you do not think the definition posed for each concept should apply to either a Completer or a Leaver, CROSS OUT the one you believe should not be included.

** ROP/Cs and secondary schools use OE codes to report vocational program data. OE codes have been changed at the federal level to CIP (Classification of Instructional Programs). However, California has not yet made the transition to CIP. Local community colleges use TOP (Taxonomy of Program) to classify programs at the local level. These are converted to CIP by the state and reported to federal agencies.

ROP/Cs use two classifications for students: 1) Preparatory—those who take a minimum of 20 hours of instruction for entry-level employment or advanced training; 2) Supplementary—those who are employed in the same occupation for which training is offered.

COMMENTS:

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Placement Rate CONCEPT Options (1)		DEFINITIONS for Placement Rate Concepts for Defined Vocational/Job Training Programs (2)	CONCEPT Should Apply to: VE (3)	CONCEPT Should Apply to: JT (4)	DEFINITION Is Acceptable YOU or Your Agency (5)	Program Providers to Which This CONCEPT SHOULD APPLY: (Circle number of Program Providers) HS (6)	ROP/C (7)	Adult VE (8)	Com. Col. (9)	JTPA (10)	Others (11)
2. UNRELATED EMPLOYMENT	d.	Former COMPLETER/LEAVER is employed full- or part-time in an occupation in which job skills used at work ARE NOT RELATED DIRECTLY to those learned in VE or JT program	1 YES 2 NO 3 ?	1 YES 2 NO 3 ?	d. 1 YES 2 NO 3 ?	6	7	8	9	10	11
	e.	Former COMPLETER/LEAVER is employed full- or part-time but job skills used ARE NOT DIRECTLY RELATED to the appropriate OE or TOP/CIP codes for which job skills were taught	1 YES 2 NO 3 ?	1 YES 2 NO 3 ?	e. 1 YES 2 NO 3 ?	6	7	8	9	10	11
3. RELATED ADVANCED EDUCATION/ TRAINING	f.	Former COMPLETER/LEAVER is enrolled at another training or educational institution in a course/program with objectives aimed at attainment of higher level skills and knowledge in a field SIMILAR to those of the previously taken VE or JT program below the baccalaureate level	1 YES 2 NO 3 ?	1 YES 2 NO 3 ?	f. 1 YES 2 NO 3 ?	6	7	8	9	10	11
4. UNRELATED ADVANCED EDUCATION/ TRAINING	g.	Former COMPLETER/LEAVER is enrolled at another training or educational institution in a course/program with objectives NOT RELATED to the previously taken VE or JT program below the baccalaureate level	1 YES 2 NO 3 ?	1 YES 2 NO 3 ?	g. 1 YES 2 NO 3 ?	6	7	8	9	10	11
5. MILITARY SERVICE	h.	COMPLETER/LEAVER is serving full-time in a branch of the armed forces	1 YES 2 NO 3 ?	1 YES 2 NO 3 ?	h. 1 YES 2 NO 3 ?	6	7	8	9	10	11
6. NOT IN LABOR FORCE & NOT SEEKING WORK	i.	Former COMPLETER/LEAVER is NOT pursuing further education or training and is NOT actively seeking employment	1 YES 2 NO 3 ?	1 YES 2 NO 3 ?	i. 1 YES 2 NO 3 ?	6	7	8	9	10	11
7. UNEMPLOYED	j.	Former COMPLETER/LEAVER is in labor force and is SEEKING EMPLOYMENT and is not pursuing further education or training	1 YES 2 NO 3 ?	1 YES 2 NO 3 ?	j. 1 YES 2 NO 3 ?	6	7	8	9	10	11

8. OTHER PLACEMENT RATE CONCEPTS. (Briefly list any placement rate concepts not previously listed that should be considered for measuring the impact of vocational/job training programs in any occupational area, level of training, or type of program provider.)

9. USE THIS SPACE TO INDICATE THE REASONS WHY DEFINITIONS (shown on this form) ARE NOT ACCEPTABLE TO YOU OR YOUR AGENCY. MAKE ANY SUGGESTIONS THAT WOULD HELP IMPROVE THE DEFINITION OR MAKE IT MORE ACCEPTABLE TO YOU. Refer to the letter of the definition to which you are referring in your comments. (If more space is needed, use the back of this form or attach additional sheets.)

GENERAL COMMENTS (Use the back of this page or attach additional sheets.)

SECTION III: *Student Follow-up and Placement Rate Information Practices* (Circle ALL numbers reflecting current practices in your agency/program.)

10. DOES YOUR AGENCY/PROGRAM CURRENTLY CONDUCT FORMER VOCATIONAL/JOB TRAINING STUDENT FOLLOW-UP TO DETERMINE PLACEMENT RATES? 1 YES 2 NO 3 ?

11. INDICATE THE TYPE OF FOLLOW-UP SYSTEMS YOUR AGENCY PROGRAM USES CURRENTLY.

    1 None 2 VEDS 3 FUSE 4 SAM 5 SEE 6 Other*

    *Give name of follow-up system or a description of means used to identify postprogram placement results:

    May study team obtain a copy of forms and descriptive information upon request? 1 YES 2 NO
    (Indicate how such information can be obtained—contact person, telephone, address, etc.)

12. HOW SOON AFTER A STUDENT LEAVES/COMPLETES A VE OR JT PROGRAM IS STUDENT FOLLOW-UP CONDUCTED?

    1 Under 6 months 2 6-9 months 3 Over 9 months

13. HOW IS FOLLOW-UP SURVEY CONDUCTED? 1 Mail 2 Telephone 3 Other (specify)

14. WHO IN YOUR AGENCY/PROGRAM CONDUCTS THE FOLLOW-UP SURVEY/CONTACT?

1 Instructor 2 Clerical staff 3 Counselor/professional 4 Administrator 5 Other

15. DOES YOUR AGENCY CONDUCT ANY FORM OF LONGITUDINAL FOLLOW-UP STUDY WITH FORMER STUDENTS?

1 YES 2 NO If YES, briefly describe:

16. DOES YOUR AGENCY ATTEMPT TO VERIFY STUDENT FOLLOW-UP SURVEY RESPONSES?

1 YES 2 NO If YES, explain (employer contact, etc.)

17. DOES YOUR AGENCY STUDENT FOLLOW-UP SYSTEM ATTEMPT TO IDENTIFY ANY OF THE STUDENT'S SHORT-TERM OBJECTIVES RELATED FOR TAKING VE OR JT PROGRAMS?

1 YES 2 NO If YES, circle ALL of the following that apply:

1 Preparation for job entry 2 Preparation for job change/advancement 3 Improvement of current job skills

4 Maintenance license/certificate 5 Skill improvement, but not for employment 6 Transfer to four-year college

7 Other personal goals not noted previously 8 Other

18. DOES YOUR AGENCY IDENTIFY THE EMPLOYMENT STATUS OF ENTERING VE OR JT PROGRAM STUDENTS?

1 YES 2 NO 3 ?

19. DOES YOUR AGENCY HAVE A JOB DEVELOPMENT FUNCTION/SERVICE? 1 YES 2 NO If YES, explain:

20. DOES YOUR AGENCY PROVIDE A PLACEMENT SERVICE FOR VE OR JT STUDENTS?

1 YES 2 NO If YES, who provides it?

21. WHAT USES ARE MADE OF FOLLOW-UP PLACEMENT INFORMATION?

1 State reports 2 Agency/school planning 3 Program planning 4 Program evaluation 5 Other (specify)

22. WHAT DO YOU BELIEVE SHOULD BE THE IMPORTANCE OR USE OF STUDENT FOLLOW-UP AND PLACEMENT RATE INFORMATION?

(Interview Guide)

Name/Position _____

Agency: ☐ SDE ☐ COCCC ☐ EDD ☐ Other _____

Indicate your opinion about utilizing the PLACEMENT RATE CONCEPTS for identifying student/trainee postprogram experiences in follow-up efforts by various occupational program areas. Circle the program areas in which you believe the CONCEPT should be used in follow-up.

Placement Rate CONCEPTS	Agriculture	Distributive	Health	Home Econ. Occupations	Office/ Business	Technical	Trade & Industry	Other
1. DIRECT/RELATED EMPLOYMENT	1	2	3	4	5	6	7	8
2. UNRELATED EMPLOYMENT	1	2	3	4	5	6	7	8
3. RELATED/ADVANCED TRAINING/EDUCATION	1	2	3	4	5	6	7	8
4. UNRELATED/ADVANCED TRAINING/EDUCATION	1	2	3	4	5	6	7	8
5. MILITARY SERVICE	1	2	3	4	5	6	7	8
6. NOT IN LABOR FORCE	1	2	3	4	5	6	7	8
7. UNEMPLOYED	1	2	3	4	5	6	7	8
8. OTHERS (specify below)								
_____	1	2	3	4	5	6	7	8
_____	1	2	3	4	5	6	7	8
_____	1	2	3	4	5	6	7	8
_____	1	2	3	4	5	6	7	8

COMMENTS ABOUT PLACEMENT RATE CONCEPTS AND DEFINITIONS:

APPENDIX D

SURVEY RESPONSES AND CONTACTS BY AGENCY

SECONDARY SCHOOLS/DISTRICTS

Amador Valley Joint Union High School District, Pleasanton, CA
Carmel Unified School District, Carmel, CA
Central Union High School District, El Centro, CA
Central Union High School District, Fresno, CA
Ceres Unified School District, Ceres, CA
Chaffey Unified School District, Ontario, CA
Colton Unified School District, Colton, CA
Fairfield-Suisun Unified School District, Fairfield, CA
Grossmont Union High School District, La Mesa, CA
Hayward Unified School District, Hayward, CA
Jurupa Joint Unified School District, Riverside, CA
King City Union High School District, King City, CA
Marysville Joint Unified School District, Marysville, CA
Montebello Unified School District, Montebello, CA
Monterey Union High School District, Monterey, CA
Newport-Mesa Unified School District, Costa Mesa, CA
Oakland Unified School District, Oakland, CA
Oceanside Unified School District, Oceanside, CA
Oxnard Union High School District, Oxnard, CA
Pajaro Valley Unified School District, Watsonville, CA
Rialto Unified School District, Rialto, CA
Roseville Joint Union High School District, Roseville, CA
Sacramento City Unified School District, Sacramento, CA
Salinas Union Union High School District, Salinas, CA
San Juan Unified School District, Carmichael, CA

(Vocational Agriculture Programs)

Los Angeles City Schools, Los Angeles, CA
Santa Rosa Unified School District, Santa Rosa, CA
Tulare Joint Union High School District, Tulare, CA

ADULT

Amador Valley Joint Union High School District, Pleasanton, CA
Carmel Unified School District, Carmel, CA
Delano Adult School, Delano, CA
Los Angeles City Adult School, Los Angeles, CA
Milpitas (Adult) Unified School, Milpitas, CA
Sacramento City Adult School, Sacramento, CA
Salinas Adult School, Salinas, CA
Simi Valley Adult School, Simi Valley, CA

ROP/Cs

Antelope Valley ROP, Lancaster, CA
Central County ROP, Garden Grove, CA
Coastline ROP, Costa Mesa, CA
Contra Costa ROP, Pleasant Hill, CA
East San Gabriel Valley ROP, West Covina, CA
Fresno Metropolitan ROC/P, Fresno, CA
Hayward-New Haven ROC/P, Hayward, CA
Imperial Valley ROP, El Centro, CA
Kings County ROP, Hanford, CA
LaPuente Valley ROP, La Puente, CA
Los Angeles County ROP, Downey, CA
Los Angeles Unified School District ROC/P Unit, Los Angeles, CA
Merced County ROP, Merced, CA
Mission Trails ROP, Salinas, CA
North Orange County ROP, Anaheim, CA
Sacramento County Office of Education (ROP), Sacramento, CA
San Bernardino County ROP, San Bernardino
San Diego County ROP, San Diego, CA
San Mateo County ROP, Milbrae, CA
Santa Cruz County ROP, Capitola, CA
Southeast ROP, Norwalk, CA
Southern California ROC, Torrance, CA

ROP/Cs (cont)

Tri-Cities ROP, Whittier, CA
Tri-County ROP, Yuba City, CA
Ventura County ROP, Camarillo, CA

COMMUNITY COLLEGES

American River College, Sacramento, CA
Antelope Valley College, Lancaster, CA
College of the Canyons, Valencia, CA
Cerritos College, Norwalk, CA
Chabot College, Hayward, CA
Coastline Community College, Fountain Valley, CA
Cuyamaca College, El Cajon, CA
Cypress College (District Response), Cypress, CA
Diablo Valley College, Pleasant Hill, CA
Evergreen Valley College (District Response), San Jose, CA
Fullerton College (District Response), Fullerton, CA
Glendale College, Glendale, CA
Golden West College (District Response), Huntington Beach, CA
Grossmont College, El Cajon, CA
Hartnell College, Salinas, CA
Indian Valley Colleges (District Response), Novato, CA
Kings River College, Reedley, CA
Laney College, Oakland, CA
Lassen College, Susanville, CA
Long Beach City College, Long Beach, CA
Los Angeles Community College District (District Response)
- East LA College
- Harbor College
- Los Angeles City College
- Mission College
- Pierce College (College Response)
- Southwest College
- West LA College
- Trade-Technical College
- Valley College

Marin, College of (District Response), Kentfield, CA
Mira Costa College, Oceanside, CA
Modesto Junior College, Modesto, CA
Monterey Peninsula College, Monterey, CA
Moorpark College, Moorpark, CA
Mt. San Antonio College, Walnut, CA
Ohlone College, Fremont, CA
Orange Coast College, Costa Mesa, CA
Oxnard College, Oxnard, CA
Palomar College, San Marcos, CA
Pasadena City College, Pasadena, CA
Redwoods, College of, Eureka, CA
Rio Hondo College, Whittier, CA
Saddleback College, Mission Viejo, CA
San Diego Community College District, San Diego, CA
- Mesa College
- Miramar College
- San Diego City College

San Joaquin Delta College, Stockton, CA
San Jose City College, San Jose, CA
San Mateo, College of, San Mateo, CA
Santa Ana College, Santa Ana, CA
Santa Monica College, Santa Monica, CA
Shasta College, Redding, CA
Siskiyous, College of, Weed, CA
Skyline College, San Bruno, CA
Southwestern College, Chula Vista, CA
Vista College, Berkeley, CA
West Hills College, Coalinga, CA
Yuba College, Marysville, CA

APPENDIX E

PROGRAMS AND AGENCIES VISITED BY STUDY TEAM

ADULT SCHOOLS

Sacramento City Schools, Adults Program, Sacramento, CA
Salinas Adult School, Salinas, CA
Simi Valley Adult School, Simi Valley, CA

ROP/Cs

Central County ROP, Garden Grove, CA
Mission Trails ROP, Salinas, CA
San Diego County Department of Education, San Diego, CA
San Mateo County ROP, Millbrae, CA
Southern California ROC, Torrance, CA
Ventura County ROP, Camarillo, CA

COMMUNITY COLLEGES

American River College
Long Beach City College
San Diego Community College District
San Jose City College
West Hills College

BUSINESS LABOR COUNCILS/PRIVATE INDUSTRY COUNCILS

Los Angeles Business Labor Council
Western Job Training Partnership Association

APPENDIX F

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APPENDIX G

Table G-1

PERCENTAGE OF SURVEY RESPONDENTS WHO AGREE WITH GENERAL AND SPECIFIC DEFINITIONS THAT COULD BE USED FOR VARIOUS PLACEMENT RATE CONCEPTS

POSSIBLE PLACEMENT CONCEPT DEFINITIONS AND COMMENTS	Percentage Who Agree With Placement Definitions Shown Below: Total Respondents — Possible No. of Responses (N=94)	Steering/ Advisory — Possible No. of Responses (N=14)	ROP/C* — Possible No. of Responses (N=30)	Adult VE — Possible No. of Responses (N=8)	Community Colleges — Possible No. of Responses (N=51)
1. RELATED EMPLOYMENT					
A. *General Definition that could apply to all public school/community college program providers.*					
"Former student is employed full- or part-time in a job in which job skills used are related to those learned in the vocational program or course."	83%	79%	83%	75%	84%
B. *Specific Definition that could apply to ROP/C programs and courses, but not other program providers.*					
"Former student is employed full- or part-time in a job related to occupations within the 6-digit OE program code for which training was given or the student is employed in an occupation within the 4-digit OE code that pertains to the broad occupational area."	51%	57%	67%	63%	37%
NOTE: This definition is adapted from the one developed and used by ROP/Cs in reporting follow-up information on the new Form VE-80 series. (Page 6, Instructions for: Regional Occupational Centers/Programs Vocational Education, Enrollment/Follow-up of Program Completers/Leavers, for Program Year 1982-83.) Furthermore, OE codes have been changed to CIP (Classification of Instructional Programs) at the federal level, but are still used in reporting information for secondary programs and ROP/Cs. Two ROP/C respondents indicated that OE codes are not inclusive enough to require placement definitions to correspond with listed occupations. A few noted that 4-digit codes would be ample for defining related placements. ROP/Cs collect placement on both COMPLETERS and LEAVERS, but several ROP/C respondents indicated this definition should apply only to COMPLETERS.					
C. *Specific Definition that could apply to community college vocational programs, but not other program providers.*					
"Former community college vocational student is employed full- or part-time in an occupation within the 4-digit TOP code for which the training was intended."	55%	57%	43%	75%	57%
NOTE: Several community college respondents stated that while 5- and 6-digit TOP codes might be helpful for local program planning, for purposes of defining successful related placements, 4-digit TOP codes would suffice. A strong contingency of community college respondents indicated that the placement rate concept, especially related to job placement, should be limited to program COMPLETERS because of the great difficulty of defining and tracking program leavers in community colleges.					
2. UNRELATED EMPLOYMENT					
A. *General Definition that could apply to all public school/community college vocational education programs.*					
"Former student is employed full- or part-time in a job in which job skills used at work are not related to those learned in the vocational program or course."	80%	86%	80%	88%	78%
B. *Specific Definition that would apply to ROP/Cs or community colleges respectively, but not to other program providers.*					
"Former (ROP/C) (Community College) student student is employed full- or part-time in an occupation not related to the appropriate (OE) (TOP) code for the vocational program taken."	55%	47%	57%	75%	51%
NOTE: This definition would apply to ROP/Cs in relation to the appropriate OE code. It would apply to community colleges in relation to the appropriate TOP code.					

	Percentage Who Agree With Placement Definitions Shown Below:				
	Total Respondents	Steering/ Advisory	ROP/C*	Adult VE	Community Colleges
	Possible No. of Responses (N=94)	Possible No. of Responses (N=14)	Possible No. of Responses (N=30)	Possible No. of Responses (N=8)	Possible No. of Responses (N=51)
3 RELATED ADVANCED EDUCATION/TRAINING					
"Former student is enrolled at another training or educational institution in a course or program with objectives related to the attainment of higher skills and knowledge in the same or similar area as those in the previously taken vocational program."	86%	93%	90%	100%	80%
4 UNRELATED ADVANCED EDUCATION/TRAINING					
"Former student is enrolled at another training or educational institution in a course or program not related in any way to the objectives of the previously taken vocational program."	73%	86%	83%	88%	63%
NOTE: A number of respondents from community colleges and ROP/Cs did not believe it was important to differentiate between Related and Unrelated advanced training or education. One of the objectives of vocational education in PL 94-482 is to prepare students for advanced training.					
5. MILITARY SERVICE					
"Former student is serving full-time in a branch of the armed forces."	80%	79%	83%	63%	78%
6. NOT IN LABOR FORCE/NOT SEEKING WORK					
"Former student is not pursuing further education or training and is not actively seeking employment."	81%	86%	93%	75%	73%
7. UNEMPLOYED/SEEKING WORK					
"Former student is in labor force and is seeking work and is not pursuing further education or training."	81%	79%	83%	75%	78%

*Includes four State Department of Education responses.

Source: Compiled by Carvell Education Management Planning, Inc., Los Altos, CA.

GLOSSARY OF ACRONYMS

ACSA	Association of California School Administrators
ADA	Average Daily Attendance
AOR	Assembly Office of Research
BLCs	Business Labor Councils
CACVE	California Advisory Council for Vocational Education
CBEDS	California Basic Education Data System
CBOs	Community-Based Organizations
CCCAOE	California Community College Administrators of Occupational Education
CIP	Classification of Instructional Programs
CMMIS	California Manpower Management Information System
COCCC	Chancellor's Office, California Community Colleges
COICC	California Occupational Information Coordinating Committee
COIS	California Occupational Information System
CPEC	California Postsecondary Education Commission
CYA	California Youth Authority
DE	Department of Education
DOT	Dictionary of Occupational Titles
EDD	Employment Development Department
EDA	Economically Depressed Areas
FUSE	Follow-up of Students and Employers
JPTA	Job Partnership Training Act
JPTO	Job Partnership Training Office
JT	Job Training
LMI	Labor Market Information
NCES	National Center for Educational Statistics
NCRVE	National Center for Research in Vocational Education
NIE	National Institute of Education
NOICC	National Occupational Information Coordinating Committee
OE	Office of Education
OIS	Occupational Information System
OJT	On-the-Job Training
PICs	Private Industry Councils
PPS	Private Postsecondary Schools
ROP/Cs	Regional Occupational Programs/Centers
SAM	Student Accountability Model
SDE	State Department of Education
SOICC	State Occupational Information Coordinating Committee
SOR	Senate Office of Research
SVP	Specific Vocational Preparation
TOPs	Taxonomy of Programs
USOE	United States Office of Education
VE	Vocational Education
VEA	Vocational Education Act
VEDS	Vocational Education Data System
VOICE	Vocational and Occupational Information Center for Educators
VPO	Vocational Preparation and Occupations

"...education should turn out the pupil with something he (or she) knows well and something he (or she) can do well. This intimate union of practice and theory aids both."

Alfred North Whitehead
(words in parentheses added to
original statement)